

THE SPECULUM.

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WHOLE No. 74.

The Tardy Collegian.

W. A. FOX, CLASS of '91.

It has been truly said that "man is a bundle of habits." How necessary it is for the individual to inventory that precious bundle occasionally.

The freshman upon entering college takes with him his bundle of habits acquired in early life, and the influence of those habits may be marked in his work as a freshman, as a doughty sophomore, as a swelling junior and as a dignified senior. Many of these habits are bad, and by most students the bad habits are pretty liberally cultivated. Especially is this true of bad habits which are least noticeable.

Nearly all the numerous failures at college may be traced to the indulgence of bad habits, and by far the greater number of these may be credited to the influence of that most generally indulged of all bad college habits, *tardiness*. The writer has seen many capital good fellows, and strong workers (when they did work), both in and out of college, fail because of the over-indulgence of this habit. Your humble servant does not pose as a saint in this respect, but, on the contrary, acknowledges repeated failures from this cause.

The tardy collegian is slow to get at his study, and when he does get to work, though he works unceasingly and with a vengeance, he must necessarily either go to class poorly prepared, or impair his bodily health by using the hours for study which should be used for rest. This same classic youth makes his appearance at chapel exercises after the prayer is begun and steals the time of his fellows by entering the class-

room after roll-call. It is really painful to see him fall into his seat as if there was not a nerve in his body, and when called upon to recite drag himself out of it again like an old-time consumptive. In the worst cases, the fellow shakes his head because it is empty or recites something he doesn't know. He is too slow to get the lecture and resorts to some fellow-student's notebook later.

The most noticeable effect of tardiness in college is seen in the delayed essays and orations. As every instructor in the literary department knows, the majority of the students are in arrears on this work throughout the course. A rather severe handling would not come amiss in this respect. A student should always be rebuked for tardiness unless the instructor knows it to be excusable.

The fellow who is tardy in his student work cannot be depended upon in the games on the campus. He is never on hand when the game should begin and plays poorly when he does come. The players who are on time grow impatient and nervous. Quite frequently a shabby game is such because of the players becoming impatient at the start, yet the guilty fellow is censured no more than are the others.

The demon of tardiness shows its teeth in the literary societies and fraternities and frequently brings about an utter failure of an evening's program, which is very embarrassing to all concerned.

The tardy fellow fills an eight o'clock appointment with his chum at nine and brings a pout to the sweet mouth of the prettiest little lady in the city by calling a half hour later than he had appointed. He lolls in his sweetheart's boudoir until twelve

when he had promised to meet his chums at eleven, and is as slow in lending assistance as he is in paying his debts.

When the college life is over, the tardy fellow goes out into the world with high hopes for the future and full of ambition. It is then he begins to realize how much this habit costs him.

Show me the college student who is late at study, at classes and in the games, and, later, I will show you a man who cannot be depended upon because he does not keep his appointments; who is ever a laggard in paying his debts; who is late at Sabbath-school and church and disturbs every public meeting which he attends by his tardy appearance; whose plans are never carried out; whose hopes are never realized; who reaps but "a harvest of barren regrets;" whose closest friends look upon him with charitable commiseration, whose whole life is a disastrous wreck and the very purpose of his existence becomes a mockery.

Some Interesting Plants in the Greenhouses.

U. P. HEDRICK, CLASS OF '93.

Our greenhouses are filled with choice plants from all parts of the world, just as an art gallery is filled with gems of art from every part of the world. There are orchids from South America and the Indies, bulbous plants from the Cape of Good Hope, palms from the Andes, Africa and New Zealand, several choice plants from the Malaysian Archipelago, cacti from the deserts of Africa and America, bananas from Hindostan and Abyssinia, aquatics from the Nile and Amazon, shrubs from the South Sea Islands. In fact nearly every tropical country adds its quota to the greenhouse collection. Then there are the flowers that enter into phases of our everyday existence; the old sweet-scented flowers that we have known and cherished from childhood.

Entering the greenhouse at the front door we see before us a bed filled with a motley collection of plants. In it are several large bananas easily told by their great size, rich green foliage and general tropical appearance. In the east end of the bed is a beautiful Norfolk pine, at the opposite end a cupressur, another striking evergreen. Near the pine is a fine fan-leaved palm, beside which is an India rubber tree, their foliage making a decided contrast, the first being a light emerald green, the latter dark and glossy. In the southeast corner of the bed is the famous *Ravenella Madagascarienus*, the traveller's tree from Madagascar. A yucca with its long pointed foliage stands guard beside the traveller's tree. Its armed foliage gives it the names Spanish bayonet and Adam's needle. Around the fountain are bulrushes from the Nile, like those among which Moses was hid. Beyond the fountain is an orange tree which fruited well last spring. At each corner in this end of the bed is a strelitzia whose gaudy flowers give it the name "bird of paradise flowers." The entire bed is covered with selaginella or moss like plant known as club moss. Thickly set in this are ferns, narrantas, crotons, begonias and other plants with striking foliage.

Let us now pass to the sides of the house. Over the front door and on the north side is a superb climbing vine, the passion flower or passiflora, under it in the corner is a data palm, *Phoenix dactylifera*, arranged along the side of the benches are palms of various kinds, in front of which are foliage plants and ferns, the foliage of the latter seems especially fitted to supplement the majestic elegance of the palms. Of ferns there are in the greenhouses about fifteen genera and fifty-five varieties. The delicate emerald fronds of the adiantums, the bold and handsome pterises, and the stately tree ferns are the most beautiful things in the greenhouses. Above the ferns at the west end

of the house is a remarkable climbing plant whose odd orchid-like flowers have attracted much attention, its smell, however, is decidedly against it—the Dutchman's pipe or *Aristolochia cymbifera*. In the southwest corner of the house are two cycads or sago palms. It is of much value in a commercial way and is of great interest to geologists. The bench on the south side is much like that on the north side, with the exception that there are three fine sweet olives, *Olea fragranz*, whose perfume fills the whole room.

We pass next to the orchid house. There are about sixty choice orchids. These are the most interesting and fascinating plants in the collection. In flower they must fill everyone with surprise, admiration and curiosity. One or more are almost always in flower. Do not fail to see every bloom. The things other than the orchids worthy of especial notice are the rex begonias, the crotons with their gaudily colored foliage, the curious verew pines, and a fine collection of young palms.

The next compartment is the rose house. In it are about fifteen standard varieties of roses. The roses are growing well and are flowering nicely now.

The next room contains a bed of smilax and a fine lot of poinsettias or Christmas plants, and a collection of odds and ends without a proper place anywhere.

We have now finished the main houses, but the visitor wants by all means to go in the propagating houses and see the foliage or bedding plants, now in their most beautiful color. The collections of cacti are at least curious. A bed of cannas and callas are also well worth seeing, the cannas are flowering in many brilliant colors, and the foliage of the callas is at its best. In the west propagating house there is a bench of carnations of which there are fifteen or twenty varieties. They promise a fine lot of flowers.

The principal things in the house below

the bank are the chrysanthemums. We have about sixty varieties of every color and size, from the little pompons to the superb Japanese sorts, whose fantastic petals extend five or six inches. The colors vary from the purest white to deep rich crimson, and from wonderful shades of yellow to distinct purple or maroon or bronze. The petals too are of unending variety of form, some are like masses of narrow ribbon, others are exquisitely quilled. A description cannot do justice to these flowers. They are just coming in flower and will soon be a mass of beauty. The World's Fair is now having its great chrysanthemum show and in all large cities the "Queen of autumn" as the chrysanthemum is called, is reigning supreme. You can get at least a hint of the beauty of these flowers by visiting the house of chrysanthemums at home.

The Usefulness of Our Experiment Station to the Farmer.

H. W. LAWSON, HESPERIAN SOCIETY.

It is not the purpose of this article to point out the necessity of scientific knowledge in agricultural matters, nor that the farmer is incapable of carrying on such experimental work as is essential to the establishment of such knowledge; our object is solely to consider the utility of this experiment station to the farmers of Michigan.

Granting that the station has made valuable experiments relating to farming, that it has at command the work done by other experiment stations and agricultural scientists, and that it is not wanting in ability and equipments to do experimental work, the question must yet be asked, does it benefit the farmers? It is evident that unless the work of this station reaches the farmers, the station is of no use to them. Then are the present means adequate to carry the knowledge possessed by the station to the farmer?

Being in connection with the college it is

but reasonable to expect that some good would reach the farmers through students. Possibly it does, but the number of students is small; many do not come from farms, and nearly all appear to come from a few localities, so not much dependence can be placed upon this.

Private correspondence, without doubt, has been of valuable service, but it is necessarily limited to a few, hence it can hardly be considered as of much use or profit to the farmers of the state. It is to be regretted that the newspapers contain scarcely any articles of agricultural interest from this station.

The farmer's institutes held by the station and college, however, have met with gratifying success. Investigation and learning have been brought in actual contact with custom and superstition. The practical questions that are asked by the farmer, "What fertilizers shall I use, and does it pay to use any?" "What rotation of crops is best?" "What will prevent smut?" and many others have been ably discussed. The farmers have been led to see, to wonder, and to think. It is doubtful if better means for improving their intellectual and financial condition lie within the power of the State. But its influences are local. It is evidently impossible for the experiment station workers to meet all the farmers of the State at institutes.

The last and main means of reaching the farmers is through the experiment station bulletins. These have contained principally the work done by this station alone. Some of them have pointed out the relative values of fertilizers, others have called attention to weeds. Some have dealt with insects and insecticides, others with subjects of horticultural interest. Various other subjects have been presented in this way. Some of the bulletins have been criticized as being of little value to the farmer. For example, it has been asked, "What good is a catalogue of birds to the farmer?" Others have met

with much appreciation. Concerning the bulletin on potatoes, a practical farmer made the following remark: "That is a valuable bulletin. I believe that if all the farmers of the state had a copy of that, it would be of more value to them than the experiment station has ever cost." This bulletin, which, perhaps is not better than others, gives the original experiments of this station, and a compilation from the work done at twelve other stations on the amount of potatoes to plant. Its conclusions are of great agricultural importance.

Even if other bulletins like this contained, besides the original experiments, the compiled work of other stations, which seemingly increases their value, yet their usefulness is not general because only a few farmers get them. It is not difficult to find communities where the farmers have comfortable homes and well kept farms, and yet not find a bulletin. Many do not even know of the station. But these proofs are not necessary. We have only to consult the mailing list. About six thousand copies are sent out. Many go to other states, while it is stated there are one hundred and forty-six thousand farms in Michigan.

It is therefore evident that the material of this station does not by these means reach the farmers. However, in time it may find its way to them. That it should go direct, seems but reasonable and just. It is held that the farmers, themselves, are responsible for this, since the bulletins are sent free when requested. This is answered by the fact that comparatively few know it, and even if they all did, it is doubtful if they would make the request, thinking, as many do, that the work of the station and Agricultural College amount to nothing.

It seems then that the usefulness of this experiment station is decidedly limited, not so much from the lack of work done, but from the fact that the material made available is not distributed to the "individuals interested in farming," and that if we wait,

as at present, for them to write for these bulletins, or get the benefit of the station through other means, it will be long before satisfactory results are attained.

It has been asked why the bulletins are not sent to all farmers. Why not? It would not be difficult to secure their names and addresses. And would not the value to them of the present knowledge of fertilizers, insecticides, fungicides and of many other subjects, more than repay the cost of distribution?

We must hope that the time will soon come when every farmer in Michigan shall receive a copy of the bulletins of this experiment station.

Yachting in Our Era.

L. I. KELLOGG, ECLECTIC SOCIETY.

Perhaps before fairly entering on this subject, it would be well to take my readers back a bit. About the first yacht, or then called ark, of any notoriety that we hear of is the one of biblical fame.

The prophet Ezekiel refers to the pleasure galleys of Tyre. Caligula's yacht was of costly cedar, the stern studded with jewels and the deck inlaid. From the time of the Phoenicians and Greeks yachting has been on the increase, though not greatly until after the American Revolution. It is an interesting circumstance, that what was the first distinctive American type, may still be seen in the pink or pinky, so common on our rivers and sounds.

The oldest yacht club was organized over a century ago, but only within fifty years have these societies gained any particular prominence. Their chief officer is usually called the commodore, sometimes the admiral, and in France the president.

By act of congress, August 7, 1848, yachts were licensed to go from port to port of the United States and by sea to any foreign port without entering or clearing at the custom house. Yachts of foreign

countries were given the same privilege, provided the nation they represented, extended the same right to the United States.

The year 1713 was a great era in American naval annals. In that year the first schooner ever built was launched from Gloucester. From that time on the interest in this sport has been on the increase, and in 1835 we have the first positive record of a big yacht race. About seven years later the first of the races for the cup was sailed, and from that time on it has been a tireless struggle for supremacy.

No regular club was formed until the New York Yacht Club came into existence, about 1844. The first models were long and wide, drawing about five feet of water under the stern and six inches under the bow. Since then the lines have changed, and changed, until to-day we have for our models the famous Vigilant of the American and Valkyrie of the English types, the first a centerboard sloop, and the second a deep, heavy-keeled cutter—both the perfection, as we might say, of fast sailing crafts.

Such yachts as the Vigilant and the Valkyrie carry an enormous amount of canvas and require on a cruise, seven to fifteen men to handle them properly, and as high as seventy on a race, the superfluous weight being used for ballast. They make from ten to often as high as seventeen and nineteen miles an hour, thus beating our lake steamers by about two to eight miles.

On the Great Lakes the interest in yachting is increasing wonderfully. Detroit, Cleveland, Chicago and most of the cities on their shores, large or small, have their respective clubs. On regatta day there is no prettier sight than the water covered with these fairy-like crafts profusely decorated with flags and alive with gay throngs of people in their holiday attire.

Naturally the races of these inland clubs are short on account of the comparatively limited space they have to maneuver in,

while the organizations, having salt water for their courses, are the most extensive and richest. It is from them that we get our cup defenders and elegant steam yachts, one of the most expensive luxuries of to-day.

On regatta day the water seems literally alive with craft, from the tiny catboat to the towering steam yacht of some eastern magnate. Here is a party of gay young ladies and gentlemen off for the day; there another party who have probably rented their boat, for at the helm is a tough, weather-beaten old mariner, who keeps one eye on his boat and the other on the weather, lest any danger should happen to his charge.

To get the marrow out of yachting requires leisure, pleasure and money. Then too, the environment of the yachtsman limits his liberty, as much perhaps, as his theory of sport. He may elect to cruise or to race, to take his outing on our peaceful coasts or off stormier shores. He may be bitten by the tarantula of matches or possessed of the fury of mug hunting.

Yachting costs. The question asked most frequently out of pure idleness is, "What does all this cost?" The answer is necessarily indirect and vague. The element of cost must always be an individual question, and the problem can be solved only by a straight appeal to the person in possession of the facts. The first cost of a craft, the crew, wages, uniforms, rations, and repairs, all these may be treated intelligently. Here at anchor, for example, are two steamers, one a family ship, the other a cruiser of a bachelor, both the highest class of yachts. The former has three deck houses, lined with the rarest of woods. In the forward one is a smoking room, furnished in the latest style, and having plate-glass windows, which give a view of half of the horizon. In the rear of this is a chart house and kitchen, which forms no small part of the luxury of yachting. Between these is a vestibule, and a carved oaken staircase lead-

ing to the saloon and cabin. The saloon, perhaps, is thirty feet wide by twenty in length, its floor is inlaid, and the whole room is finished in polished and enameled woods.

Here is a fine mantle and fireplace, overhead a domed skylight, in every place are rugs, tapestries, cabinets, lamps, the hundred accessories of the most opulent homes which give a warmth of color and a cheerfulness that is very pleasing.

Forward of this are eight state rooms, all having a hand carved bed, dressing table, chiffonier and wardrobe. In the floor a bath-tub is so deftly set, that the trap can hardly be seen, even when the rug is removed.

Perhaps also there will be a nursery, and last of all, state rooms for the guests, all finished in white and gold and furnished with every luxury the heart can desire.

The cost of this yacht was nearly three hundred thousand, and her annual expenses amount to nearly a third of that.

In the second boat the smoking room is finished in old oak artistically paneled. In the saloon brass chandeliers, decorated in Persian style, hang clear of a skylight colored in harmony with its surroundings. The mantle is carved in English oak; in the wood work beveled glass mirrors flame with prismatic colors, the wainscotting is sheathed in mahogany and ornamented with golden thistles.

In the ladies' cabin forward, beveled glass mirrors are let into the doors and cabinets, the floor is a rich mosaic and the chandeliers are of crystal. The crew are given employment the year around and number fifty.

There is not a very great difference in the cost of keeping a sail or steam yacht, except for coal, and the former often foots up to the larger amount. Of course the great time of the season is the regatta. Usually a quiet place on the Connecticut shore or Long Island Sound is chosen for the start.

As soon as darkness has fallen the sky is

suddenly aflame with a signal rocket, and in a moment the air is filled with whizzing Roman candles, port fires flash from the riggings and Chinese lanterns festoon the hulls. The flagship is ablaze with one mass of electric lamps. A thousand reflections glimmer in the water, and the music of a band at the hotel comes softly stealing over the way.

The sounds of singing and the picking of a banjo from some merry party make drowsiness gradually steal over you, and when eight bells ring you are sleeping a dreamless sleep, rocked by nature's own hand.

Early the next morning you are awakened by the working of the pump, the dashing of water, and the knocking of booms overhead, though the open ports steals a fresh breeze, and tumbling out you go on deck, have a look at the weather and the hands washing down, and then fling on a pair of bathing trunks and take a delicious plunge overboard. As the start is to be an early one, everybody is astir, and by the time breakfast is over anxious ones are hauling cables taut and making sail. After a while the flagship with an assistant boat takes position at either end of the imaginary line, and then aided by the booming of cannon with a brave display of signal flags, the yachts sail up and are given their positions in the start.

The land slips by, the smooth waters of the sound give way to the billows of the Atlantic, the fleetest rush to the van, the dull and careless drop to the rear.

When you come on deck after luncheon, if you are in good luck, you are in the midst of a great struggle for supremacy; there is the great sloop, built to defend the cup and along side of her a schooner majestically treading the waves.

As the goal is approached the flagship steams ahead, and as the winner crosses the line her gun rings out its welcome.

In a day or so the great cup races are

sailed, and then the waters are covered with excursion steamers crowded with people who are not lucky enough themselves to own a yacht but take a kindly interest in the sport.

The last night a grand reception is given on the flagship by the commodore, and here at its height surges the social life of the cruise. And what a picture it makes, with the beautiful costumes, music, illuminations, and the view afloat where hundreds of lanterns are rising and falling in the roadstead.

After all, nothing brings us so near fairy land as a ship, a summer's night, a gentle breeze and ripples of distant music.

S C I E N T I F I C.

Items From the Celery Fields.

G. C. DAVIS.

At the suggestion of our science editor, a few notes from a nearly completed bulletin on celery insects will be given. In studying the celery insects in the fields this season from an economic point of view, many features new to scientific entomology were observed, some points of which may be of interest to the general reader. Celery insects have been studied little if at all before, and in all our economic literature only two species have been reported as celery insects. In the present season's work forty-six species have been found to feed on celery and several are suspected, but positive proof is still wanting. Several of these species, I learn, have never before been bred, and nothing known of their habits and immature stages, and many others are new to economic entomology, having never been bred or found on cultivated plants before. Two species are entirely new to science.

In an economic way it is to be hoped much good will come. It is quite conclusive, from experiments made, that the arsenites are dangerous insecticides to use owing to

the structure of the plant, and other insecticides must take their place. A cheap and efficient tar-covered insect collector has been devised that will greatly assist in lessening the numbers of a certain class of insects. The best known remedies are given for all the species treated.

Considerable experiment work for remedies was carried on, but the most extensive was with the insect designated as the Celery Negro Bug, which was so severe on celery at Tecumseh this season. It has long been known to entomologists as a pest at times on strawberries, raspberries, cherries, grapes and some other cultivated plants. The remedies that have been suggested were found to be of little more avail than a hard shower on the bug. For the true bugs, kerosene emulsion is our best remedy, but owing to the hard, compact armor of this bug, the effect was slight. Though this is the most difficult insect I ever had to deal with, yet I now feel confident it can be controlled next season if properly handled. In the experiments it was found that the bug was very susceptible to odors and was repelled considerably by them. The best repellent we found was crude carbolic acid, and this will form part of the treatment. Hot water will constitute the remainder of the combination.

Probably all have noticed the rusty spots with more or less of a bruised appearance on the otherwise pure white celery stalks. Many have attributed it to a rust. The celery growers at Kalamazoo and other places almost invariably attributed it to "sun blight" till shown that it was due to the work of a bug inserting its beak, extracting the sap, and, as some conjecture, poisoning that part of the plant. Quite a share of the celery in many fields was badly spotted by this Tarnish Plant Bug and greatly injured for market. As soon as growers learn what to do, much of this injury can be averted.

Celery seems to be particularly attractive to the true bugs. Besides the two species

mentioned, twenty others of the celery feeders belong to this same order—Hemiptera. Why this should be, is hard to explain, unless it be that the plants are low and dense, and afford them the ample protection necessary for their retired and shy nature.

Of the more purely scientific items gleaned, one or two will probably interest the SPECULUM readers. The moth, *Mamestra picta*, usually lays from 100 to 150 eggs in a bunch on the celery leaves, but one bunch was found that contained 452. Should all these eggs develop into caterpillars, they would strip the plants when the moths were plentiful. This season only an occasional caterpillar appeared, owing to the work of parasites. Just about the time we should expect the eggs to hatch, instead of caterpillars, little four-winged flies come from these almost microscopic eggs. Perhaps the force of the word *little* will be best appreciated when I tell you that this egg parasite is only one thirty-fifth of an inch in length and not one-fourth as broad. The parent parasite deposited her eggs inside the eggs of the moth and the young parasite feeds on the substance of the host egg. Sometimes a number of these minute creatures develop in a single egg.

Another parasite, working on the caterpillar of this same species, spins a cocoon after reaching its growth in the caterpillar and remains in this winter home till the following spring before issuing as a winged form to again parasitize some other victim. Little is known of the method used in a parasite forming its cocoon, and, as opportunity favored me with a chance to observe several through the process, it will be given as explicit as notes alone can. By the time the caterpillar is nearly half grown, the larva of the parasite inside the caterpillar is full grown. It then issues from the side of the caterpillar only a short distance in front of the hind pair of legs. When only part way out, it begins spinning its silky threads

and attaching them firmly to the caterpillar around it. From this foundation it weaves out by looping the web nearly an eighth of an inch and fastening each time as it is brought back. After a little basket is formed in this way on one side, the parasite issues entirely and enters the web sack it has made. The next thing is to stretch and shape the sack, strengthening it all the while in the weak places. Then begins the gradual closing of the embryo cocoon around the parasite, finishing last on one side next to the caterpillar, but before entirely enclosed, it fastens webs that draw it tight to the side or else under the caterpillar. The work so far has taken the parasite about three-quarters of an hour. The rest of the work is a series of weaving, turning, pushing and shaping till it has made the web so thick in two or three hours that the work can no longer be seen. The caterpillar remains inactive after the parasite escapes and in a few days dies from the effect.

The sixth annual oratorical contest was held Friday evening, Oct. 27, at eight o'clock. The program was opened by a piano solo by Miss Loa Renner. The first oration was delivered by Mr. R. S. Welsh of the Hesperian Society, whose subject was "Our Erring Brother." Mr. Clay Talman of the Union Literary Society, delivered the next oration on the "Influence of the American Press." This was followed by a selection of music by a stringed orchestra. "Politics vs. Statesmanship" was the subject of the next oration, which was delivered by Mr. Leroy Wilson of the Eclectic Society. The last oration was delivered by Mr. C. C. Pashby of the Olympic Society, upon the subject, "The Poor we Always Have With Us." This was followed by a guitar solo by Mr. E. D. Partridge. The judges were: On composition, Miss Bancroft of Albion, Prof. C. H. Gurney of Hillsdale, and Prof. C. O. Hoyt of Lansing; on delivery, Hon. Judge M. V. Montgomery, Rev. H. S. Jordan and Rev. E. B. Patterson of Lansing. Mr. Wilson was awarded first prize and Mr. Welsh second. After the presentation of the medals by Miss McArthur, the program was closed by a selection by the orchestra. The contest was very close and was one of the best ever held at the college.

Friday evening, Oct. 13, Professor and Mrs. Cook entertained the members of the senior class at their home. A pleasant time was had by all.

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AGRICULTURAL COLLEGE, NOV. 10, 1893.

"When 'ere a noble deed is wrought
When 'ere is spoken a noble thought
Our hearts in glad surprise
To higher levels rise."

THE long-looked-for and long-talked-of oratorical contest came at last. Without trespassing on the rights of the editor of College News we wish to add our most hearty congratulations to that of the most competent judges to the participants in this contest for the excellence of their composition and their most admirable delivery. Mr. L. A. Wilson who received the first prize, a gold medal, has an impressive and pleasing appearance, an excellent voice and faultless enunciation. He is a very forcible speaker and with his clear mind and perfect diction easily won the first place—not only with the selected judges but in the minds of the entire audience. Mr. R. S. Welsh

received second and delighted his audience with his vivid pictures and earnestness of presentation. Mr. Pashby's composition was excellent and he spoke with considerable feeling. Mr. Tallman, though in competition with higher classmen, did very creditably. All deserve much praise for good memory, composure while speaking, cordial sympathy for each other, and concurrence in approval of the judge's decisions.

WE have had in this State for the past few years, what is known as the Michigan Intercollegiate Athletic Association, (M. I. A. A.) To say that this association is a good thing for the colleges by way of stimulating their athletes to more manly efforts is putting it lightly. Recognizing the greater importance of oratory, why do we not organize an Intercollegiate Oratorical Association, (M. I. O. A.) and receive even greater benefits? Some will say, "we would think that farmer's college would be the last to propose anything of the kind. They don't get the drill in language and training in elocution down there that we get. Why, they wouldn't have any show at all." Never mind, our greatest orators were born on farms. Scarcely ever, if ever, does there come a time when our college has not men who would gladly and successfully compete with men from any college under the sun. Let the other colleges come forward if they wish, match their best men against ours and let the assembled students then applaud the possessors of the most coveted gift as they do now, the man of strength of muscle and fleetness of limb.

FOR many years the Y. M. C. A. at this college has endeavored to furnish at least one or two lectures per term by some speaker of note from outside. These lectures have usually been of such a character as to well repay the time, effort and expense of obtaining the speaker. The entire body of students with the faculty,

have always given their sanction and hearty support to all of these enterprises. We think, however, that these lectures, or entertainments, as the case may be, being dependent on the entire college population for support ought to be controlled by the entire body and not simply by a few. Let the Students' Organization elect two men and the faculty one, to act as a committee on a lecture course and then the characters of the speakers may be selected more in harmony with the wishes of the majority. Right along this line it is to be lamented that the weekly lectures formerly given by members of our faculty have been discontinued. The large attendance to hear Prof. Cook's talk on evolution the other evening, is sufficient proof of the interest the students take in such lectures.

OUR president, Mr. L. G. Gorton and others, have established a "citizen's lecture course" at Lansing, which offers special rates to the college boys. Three of the best attractions in the course being offered to them for one dollar. These come at a time when the students are at the college, viz: James Whitcomb Riley and Douglass Sherley, Nov. 1, 1893, The New York Philharmonic Club, March 2, 1894, Fred Emerson Brooks, March 30, 1894. No doubt many of the boys will be glad to avail themselves of these opportunities at so reasonable a price.

ON account of over-stepping our allotted space in the last number of THE SPECULUM, we have promised ourselves to bridle our pen in this issue and endeavor to make the numbers average, therefore the editorials must not be "long drawn out." It will be noticed also that we are obliged to be out a day or two earlier than usual in order to have this issue in the hands of the students before their departure for home, which fact in itself will have a tendency to keep us within bounds.

ONE of the many good things that some of our college faculty are doing for the farmers and their families is the establishment of the Farm Home Reading Circle. We think every newspaper in the State has set before the people the plan of this enterprise and its benefits. Undoubtedly very many families in Michigan will spend pleasant and profitable evenings in reading along these prescribed lines. Students too would do well to make note of this if they keep abreast of the times and are well informed on all current topics.

WE know there are many alumni not receiving THE SPECULUM who would be glad to have its monthly visits whose address we have not. Through thoughtlessness many even of the class of '93, went away without leaving their future address. The business manager or any of the editors would be glad to receive communications of any nature whatsoever that would be serviceable to the advancement of THE SPECULUM. If you are in arrears, Mr. Welsh would be very glad to send you a statement of your account and have it balanced.

Our Boarding System.

Since the organization of the college the boarding system has been a matter of constant discussion and frequent change. Happily all discussion and change have from time to time been for the better until we have now a system which if lived to strictly would be almost faultless. It may not be uninteresting to many to know something of the history of our boarding system.

At first the students all ate in one large dining room in the basement of Williams Hall but the management became bad and the price of board high. Owing to the large quantities of food that were cooked together the dishes had too great a variety of odor to be in the highest degree savory. In the fall of 1882, when the price reached \$3.05

per week, the crisis came and the outcome was that a club system was adopted under the control of the students. The basement of Williams Hall was divided, as it still remains, into three dining rooms and for a time the other two clubs dined in the armory. This system at once raised the quality of the board and for a time was considered pretty good; but incompetent, or overworked stewards often neglected duty so far as to allow members to leave the college with large debts for board and, on the other hand, left dealers unpaid for provisions. In less than ten years, notwithstanding many extra assessments, a debt of over two thousand dollars stood against the clubs. It was then in the spring term, 1892, that the present association was formed. By becoming an incorporated body and having each boarder pay for a share of the stock, a fund was created by which the accumulated indebtedness of past years has been wiped away. It was not just, but it seemed to be the best way that could be found to set the clubs free from the disgrace of debt. This new system has proved itself to be decidedly better than the old, especially as boarders are obliged to be much more prompt in paying their board. But nearly two years have demonstrated the fact that competent stewards and auditing committees can not always be found and as a result clubs run in debt term after term as of yore. It takes a good book-keeper and a man of business ability to buy from \$1,000 to \$1,500 worth of provisions a term, and keep the accounts of fifty boarders and numerous dealers in a proper way. No student can do himself justice in his course and devote as much time as is necessary to the accounts and running of a club. As a consequence of this neglect, even in this brief period of less than two years, the books of several clubs are in a most disreputable condition. Not only this, but there has been scarcely a term when students have not been required to pay debts incurred during a previous

term. This term, however, "Caps the climax," and the auditing committee, which, by the way, is a good one, announces the price of board necessary to cover the debits of Club C to be \$4.49 per week. It is a bad state of affairs and it is hoped that it may open our eyes and provide a means of safety from its recurrence. A committee has been appointed to look into the advisability of having a business manager, who would be a competent book-keeper, engaged to do all the work now required of the stewards. We believe it would cost the clubs about the same as it does now, giving free board to one of their number, and that such a man with his entire attention concentrated on the business would keep his accounts properly and reduce the cost of board very materially. Of course we believe the ideal system to be that of boarding with private families and it would not be a bad investment of capital if men of means would erect cottages near the grounds to be occupied by families for the purpose of taking boarders. With such an opportunity to board and room, we are confident that the number of students at this college would be doubled inside of two years. This would also give ladies an opportunity to attend. The time is coming, we hope it is not far distant, when students' expenses shall be greatly diminished, their numbers wonderfully increased, and the name of the Agricultural College of Michigan become familiar to the members of every household in our fair state.

To Mr. Chase Newman we are indebted for the following cost of heating the three dormitories per year under the present systems, viz.: \$4,189.15. It is impossible to be accurate from the data that can be procured, but this is probably not far astray. The amount received from students per year for room rent and incidentals is, when all the rooms are occupied, \$5,711.50. We hardly dare reckon whether the price for room rent

and heating combined is too high or not with the former figures before us, but we do say that our present system of heating is an outrageous waste. It is claimed on good authority that here there is a loss of heat by radiation of twenty per cent. An experiment on another system of heating in a circuit of nearly two miles, showed a radiation of not more than three per cent in the coldest weather. The average room here, including heat and about one hundred and ninety-two cubic feet of air, costs about sixty cents per week. The average student's room in Ypsilanti, beautifully furnished and cared for without heat costs \$1.00 per week. If you had your choice, which would you take?

WE are very sorry that time and space will not allow us to give to Prof. A. J. Cook the acknowledgments that are his due at this time when he is about to bid his farewell to this college, with which he has been connected for the past twenty-seven years. THE SPECULUM, May 10, 1892, gave its readers notice of Prof. Cook's acceptance of the chair of zoölogy at Pomona College, California, duties to begin January, 1894. When we return next spring, Prof. Cook's genial face and cordial hand will not be here to greet us. In losing Prof. Cook, the M. A. C. loses such a man as is rarely found. Conspicuous among his many noble traits are his love for his students, a love for his college, and a strong desire to bring practical benefits to men everywhere, especially in the line of scientific thought and practice. With these traits he combines untiring energy and zeal for the accomplishment of any enterprise which he undertakes. Seldom do we meet a man so well informed on such a wide range of branches of learning as he. Prof. Cook's good work is not confined to his class room. For many years he has been a shining light at farmers' institutes and various gatherings in this and other states. His pen, too, has been busy during all these years, and as a result he has

become the author of many valuable publications, among which are the following: "Manual of the Apiary, or Bee Keeper's Guide," "Maple Sugar and the Sugar Bush," "Injurious Insects of Michigan," "Silo and Silage," numerous bulletins, etc.

Prof. Cook was born near Owosso, Mich., August 30, 1842. He graduated at this college in 1862. The years 1862 to 1864 he spent as a teacher in California. After this, he became professor of entomology at this college, and has held the position as before stated for twenty-seven years.

His marriage occurred June 30, 1870, to Miss Mary H. Baldwin of Dayton, Ohio, and by the union has been blessed with two children, Bert and Kate, both of whom graduated with honors with the class of '93. With a deep sense of gratitude to Prof. Cook for his work here THE SPECULUM extends its best wishes for him in his future home in the land of sunshine and oranges.

THE term is nearly ended. Friends must part and associations be broken up for at least twelve weeks. For nearly six months our lots have been cast together, our interests have been one, our environment the same. During the winter vacation each will "chase his favorite phantom." This long suspension of college duties, coming in a time when the country people at least have their most leisure, gives such opportunities for culture and recreation to the boys from the farm as are rarely found. Already the distant jingling of the bells comes tingling to the ears and visions of elegantly lighted parlors, hearthstones with glowing embers and merry circles where friendship is sincere, love true, all sadness excluded and no thought for the morrow, make earth itself a heaven of bliss.

May kind thoughts of our Alma Mater ever be with us and let us all seek to make her honored throughout the State. Each student is partially responsible for the reputation of the college; let us seek to make

the Agricultural College of Michigan a synonym for high scholarship, dignified demeanor and character untarnished. Our numbers ought to be increased. Twice the present number of students would give an impetus to our work that would be marvelous. None have better opportunities to get desirable men to become students than have the present students during the coming vacation. They need not say as do other friends of the college "go" but they may say "come where you may have unsurpassed opportunities to make the best development of the qualities that are in you." May we all keep the welfare of the college at heart, work for it gratuitously and zealously, and it will some time bring us showers of blessings above anything of which we have ever dreamed.

COLLEGE NEWS.

Mrs. Ella Kedzie spent Sunday, Oct. 29, with her daughter at Olivet College.

The Chemical Department has just received a large installment of glassware from Germany.

Work upon the building for the new foundry is progressing rapidly and will soon be completed.

Saturday evening, October 27, the Olympic Society entertained their friends with a program and hop.

Who plays foot ball? The class of '95. Who says so? '94 and '96. No, they don't say so but they know it.

There are prospects that a winter course in dairying will be conducted in connection with the Agricultural Department.

Dr. Grange is doing some work in dissecting before the class in Veterinary Science, during the latter part of this term.

There are decided rumors that Bachelor's Hall will be deserted by two of its occupants sometime during the coming winter.

Mr. E. J. Cook and wife of Owosso, Mich., spent Sunday, Oct. 29, at the college, visiting his brother, Professor Cook.

Friday evening, Oct. 20, the Union Literary Society gave an entertainment and hop to their fair friends. The occasion was enjoyed by all.

President Gorton and Professors Taft and Smith, represented the college at the agricultural congress which was held at Chicago recently.

The price of board in the various clubs for this term is as follows: Club A, \$2.90; Club B, \$2.39; Club C, \$4.49; Club D, \$3.01; Club E, \$2.97.

Dr. Beal and Mr. Mumford are in Chicago, overseeing the packing up of the college and State forestry exhibits preparatory to their removal here.

Tuesday afternoon, Oct. 24, at five o'clock, in the chapel, Professor Cook gave a very interesting and instructive lecture upon the Theory of Evolution.

The work which Mr. Gulley did will hereafter be divided between Mr. Coryell and Mr. Gladden whose salaries have been raised in consequence of the additional work.

Friday evening, Oct. 24, under the auspices of the Y. M. C. A., the Pigott Sisters Quartette gave an entertainment at the college, which was thoroughly enjoyed by all present.

Saturday evening, Oct. 14, the Hesperian Society entertained the Faculty. Friday evening, Oct. 27, they gave a social party and hop. A very pleasant time is reported upon both occasions.

It is probable that some radical changes will be made in the system of work upon the Farm Department during the next year. More practical farm work will be done and less of the experimental work.

Our worthy Editor-in-Chief mistakes the spirit in which the lower classmen look upon the senior tiles. It is rather from a sense of pity than approbation that they refrain from molesting them, for the seniors *must* have something to distinguish themselves from freshmen.

The Farm Department is refencing the fields south of the experimental and sheep barns. There are now four fields running north and south between the barns and the river. The fence is being furnished in the form of samples, by the different fence companies. So far the Hartman, Jones National, Keystone, Buchanan and Sedgewick fence companies have furnished samples.

The leading farmers of Highland, Oakland county, Mich., maintain an Agricultural Club which meets once a month. At their last meeting the question for discussion was: "Is the Agricultural College conducted in the interests of the farmers." Mr. A. C. Bird of the class of '93 invited Dr. Kedzie to be present and to take part in the discussion. Aside from Mr. Bird and Mr. Wood, who was a former student at the college, no one had a good word for the college. The farmers present had been readers of the *Michigan Farmer* and had imbibed all the prejudices of that paper against the college. The members of the club expressed themselves very frankly in regard to the college, one member stating that the last legislature had appropriated \$100,000 for each of the next two years; an error of only \$166,000 for the two years. That every graduate cost the State \$10,000, and that such graduates did not return to the farm, but engaged in some other calling. Another

member compared the college to a sick elephant, to which five doctors had given barrels of medicine, and the only fear of the owner was that the elephant wouldn't die. He said that the people had given the college barrels of money, and their only fear was that it wouldn't die. After two hours of such scoring of the college, Dr. Kedzie was invited to speak upon the question. Disregarding the flings at the college, by the former speakers, he attempted to show what the Chemical Department had done for the farmers, reminding them that much of the good accomplished by the college might be of such a nature as not to be at once recognized; for instance, the statement was made by a distinguished scientist of Philadelphia that the use of paris green to destroy insects would ruin the land for production of grain, that wheat raised upon such ground would contain both arsenic and copper, and be unfit for food. This idea was taken up in Europe by journals which were anxious to destroy the market for American wheat. Dr. Kedzie secured the appointment of a committee in the American Public Health Association, of which he was a member and devoted a year's work outside of the class-room to the refutation of this assertion, and showed that grain raised upon such ground contained no traces of poison. He then spoke of the efforts of the Michigan Millers Association to drive Clawson wheat out of use on the plea that it contained so little gluten as to be unfit for human food. Full details of this investigation, by which the excellent qualities of Clawson as compared with any wheat grown in our State was demonstrated, were placed before the club. He then called their attention to certain frauds in the shape of fertilizers shipped in this State by certain Ohio parties, which consisted principally of marl, called Ohio superphosphate, worth perhaps \$1.00 per ton, but which sold for \$15 per ton. The marl was analyzed, the results published, and that ended its sale in this State. Another party imported large quantities of powdered furnace slag with the addition of a little common salt, offering it for sale under the name of Western Reserve Fertilizer at \$22 a ton. This was analyzed, the results showing it to be worth thirty-four cents a ton were published, which immediately stopped the sale. He spoke of the frauds in feeding stuffs which had been exposed. Several members of the club then spoke of these frauds. At the close of the meeting the club passed a hearty and unanimous vote of thanks to Dr. Kedzie, and extended a cordial invitation to come again.

His head was jammed into the sand,
His arms were broken in twain;
Three ribs were snapped, four teeth were gone,
He ne'er would walk again.

His lips moved slow, I stopped to hear
The whispers they let fall;
His voice was weak, but this I heard,
"Old man, who got the ball?"—*Ex.*

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 this department, often, thus making his work much easier and the department more interesting to all.

Oscar Terrill, well known to many of the older students, died at Meridian, on October 28, of consumption.

W. W. Parker, '93, sends us the following from Ann Arbor: "There are, all told, about two dozen M. A. C. boys taking studies at the U. of M. On the night of October 28, fourteen of them got together at J. E. Hinkson's headquarters on Thompson street, and passed the evening pleasantly, cracking nuts and jokes and partaking of liquid refreshments, procured from a neighboring cider mill. Among those present might be mentioned Prof. N. D. Corbin, who is connected with the *Ann Arbor Register*; C. P. Locke, senior law; C. S. Goodwin, junior law; the Winegar brothers, L. J. Briggs, Joseph Perrien, Herbert Rich, S. Lawton, and Harry Buell, all of the Literary Department; and Perry Lawton of the Department of Medicine and Surgery. During the evening it was suggested that some sort of a permanent organization be made and the results will be stated more definitely later. The evening closed with a hearty M. A. C. yell. Among the M. A. C. boys who are in Ann Arbor, but were not present at the time, are F. W. Ashton, '91, senior law, Joe Foster and W. E. Chapman, senior medics, together with Morse, with '85, Harper, Klein, Mulheron, George Phillips, J. E. Brum and the two Cannons. The M. A. C. 'spirit,' that subtle something, which binds us together, is strong with us here and will remain so as long as our reason and memory remain unimpaired." From the *Detroit Tribune* we learn that the above meeting resulted in the formation of a temporary organization with the following officers: C. P. Locke, chairman; F. P. Lawton, secretary, and J. E. Hinkson, C. S. Goodwin and C. R. Winegar, executive committee, with power to draft a constitution for a permanent association.

'62.

Prof. A. J. Cook visited Chicago at the time of the convention of the International Bee-Keepers' Association.

'64.

William Webster of New Smyrna, Fla., suffered severely from the recent floods which swept the Gulf coast. His residence was demolished, the estate devastated and the household goods scattered for miles around.

'68.

Prof. Gulley left for his new field of labor about the middle of October.

WITH '70.

L. C. Mills, now a resident of Kentucky, visited the college recently, accompanied by his wife and child.

'73.

B. T. Halstead of Petoskey, spent a few days at the college in October, visiting his son, B. H. Halstead, '97.

'74.

H. P. Jenney took the occasion of being in Lansing with a case before the Supreme Court, to pay a visit to the college. Judge W. L. Carpenter, '75, of Detroit, also visited the college on the same occasion.

'77.

Prof. A. B. Peebles took a "stop over" at Lansing while on his way to Chicago in October. He expects to spend the coming summer at his Alma Mater.

'78.

Rev. H. V. Clark has accepted the pastorate of the Methodist Protestant church at North Lewisburg, Ohio.

'79.

Frank Benton was re-elected secretary of the International Bee-Keepers' Association at its convention in Chicago, October 11.

'81.

Alva Sherwood has resigned his position as manager of the Walker farm at Walkerville, Ont. He will be succeeded by P. M. Harwood.

A. W. Troupe (M. D., Rush Medical College, '84), is surgeon for the St. Louis & Southwestern R. R. with headquarters at Pine Bluff, Ark., where the railroad hospital is situated, of which the doctor has charge. Dr. C. A. Smith, who was a classmate of Dr. Troupe, is chief surgeon of the same railroad and is situated at Tyler, Texas.

'83.

Arthur C. Bird, a leading farmer at Highland, Mich., is a member of an enterprising farmers' club at that place. Through his influence Dr. Kedzie delivered an address on "The College and its Work" on October 28.

'84.

E. Carl Bank and wife left Lansing for Ione, Cal., Oct. 25.

Oriel Hershiser is vice president of the International Beekeepers' Association for the ensuing year.

J. R. Abbott is delighted with his new location at Los Angeles, Cal. He has not yet entered any special line of work but is still prospecting.

WITH '84.

E. R. Stone of Almont took in the Fair on the occasion of the Bee Keepers' Convention.

L. K. Woodburn spent the summer in Chicago as superintendent of the Michigan Dairy Exhibit at the Exposition.

'85.

It is stated on good authority that Orrin Dunham has become a Benedict.

H. E. Thomas was one of the attorneys in the celebrated Hurd case at Lansing. His plea before the jury received high commendation from the press.

'86.

John W. Clemons has been elected commissioner of drains for Clinton county.

'87.

George J. Hume has removed from Loomis, Wash., to Latah, same state.

'88.

C. B. Cook is the contributor of a valuable article on the "Benefits of Science to Agriculture," which appeared in a recent number of *Science*.

F. H. Hall has accepted a position in the Department of Agriculture at Washington, as bibliographer in the experiment station branch. He entered upon his duties Oct. 1.

George L. Teller has been recommended to the State Board of Agriculture for the degree of M. S. Professor Teller is chemist at the Arkansas Experiment Station connected with the Arkansas Industrial University, and is one of the most promising of M. A. C.'s younger alumni.

'89.

F. B. Stockwell who is travelling for a Detroit firm, visited Lansing recently.

WITH '90.

James I. Berry is employed in the office of the Commissioner of Lands at Lansing.

'91.

Miss Grace L. Fuller has been appointed a teacher in the Lansing High School. *Quoted 99*

WITH '92.

B. O. Johnson, D. V. S., is situated at Benton Harbor, where he is meeting with the best of success. He visited Chicago recently.

'93.

H. M. Goss spent some time as a chair-wheeler at the Exposition after he left college.

A. B. Cook spent Oct. 28 on the grounds. He is engaged in tilling the soil around Owosso.

W. L. Harvey has accepted a good situation in the auditor's office of the Chicago and Northwestern R. R. at Chicago. He spent a few days at the college before entering upon his new duties.

O. B. Hall has entered the Detroit Medical College. His address is 135 High Street, East.

WITH '93.

Percy A. Barlow has resigned his position as physical director of the Saginaw (E. S.) Y. M. C. A.

He has become very popular during his stay in Saginaw and there is a petition afloat to the effect that his resignation be not accepted.

William W. Kraemer left college in the fall of '89. He taught in Eaton county for a year and then spent a year at the Ferris Industrial School at Big Rapids. In '91, he was appointed principal of the Pierpont High School and is now entering upon his second year as principal of the East Lake School's.

WITH '95.

Orlando Elliott is working in a saw-mill at East Tawas, Mich.

Gerrit Masselink has been appointed assistant principal of a private school in Chicago.

J. B. Dodge is keeping books for the A. W. Dodge Clothes-pin Co. at Morley.

WITH '96.

C. J. Combs is an assistant in the Elmira schools.

A T H L E T I C S.

Contrary to the statement given out previous to the last issue, six men were able to go to Hillsdale for field-day. All had given up the idea of attending and had stopped training some time before the event was to occur. Poss in particular went with only the practice of a 440 yard dash for the bus after five minutes warning that he was at liberty to go. Such was the preparation with which the athletes went. Little could be expected from such a beginning, and this makes the result the more startling. If such phenomenal success can rest with our fellows when they go hurriedly from the shops, gardens and farm, who would predict the result of a field-day should they devote as much attention to training as do some with whom they match skill and endurance.

The events as arranged in the official program are:

THURSDAY EVENING.

One hundred Yards Dash—Beese, M. A. C., first, 11 seconds; Cass, Hillsdale, second; Vary, Olivet, third.

One-quarter Mile Bicycle—Gunnison, Albion, first, 49 seconds; Rork, M. A. C., second; Alvord, M. A. C., third.

One Mile Run—Cass, Hillsdale, first, 5 minutes, 32 seconds; Freeman, Albion, second.

Running High Jump—Whitney, Hillsdale, first, 5 feet, 1 inch; Petley, M. A. C., second.

Four Hundred and Forty Yards Dash—Beese, M. A. C., first, 56¾ seconds; Petley, M. A. C., second; Poss, M. A. C., third.

One Mile Bicycle—Gunnison, Albion, first, 2 minutes, 53½ seconds; Rork, M. A. C., second.

One Hundred and Twenty Yards Hurdle Race—Poss, M. A. C., first, 18¾ seconds; Beese, M. A. C., second.

Mile Walk—Keys, Albion, first, 7 minutes, 52 seconds; Wilber, N. A. A., second.

Running Broad Jump—Poss, M. A. C., first, forfeit.

Two Hundred and Twenty Yards Dash—Beese, M. A. C., first, 25 seconds; Cass, Hillsdale, second.

FRIDAY FORENOON.

One-half Mile Run—Petley, M. A. C., forfeit.

Two Hundred and Twenty Yards Hurdle—Beese, M. A. C., forfeit.

Pole Vault—Poss, M. A. C., first, 7 feet, 6 inches; Whitney, Hillsdale, second.

Relay Race—M. A. C., first, forfeit.

In tennis singles Perine of Albion won from Packard of Olivet; Wilber of N. A. A. won from Chase of Hillsdale, and the finals resulted in Wilber's defeat by Perine. Doubles have not yet been played.

Ten were in attendance from Albion, seven from Olivet and three from Ypsilanti. All report a hospitable reception.

The evening sports were not so well attended as it was expected they would be. This contributed to the debt of slight proportions that remains upon the association.

Keeping up with the events of the season, foot ball has become the all-talked-about sport on the campus. Considerable practice has been obtained for several weeks under the direction of Vanderhoef and Beese, and very good results have been attained.

A game between '95 and '96 occurred on Saturday, October 21, as a result of a challenge by the sophomores. The weather was fine and the crowd quite large when the opposing lines drew up at three o'clock in these positions:

'95 '96		'95 '96
Clark	Centre	Mitchell
Simcock	R. Guard	Heck
Randall	L. "	Normington
Nellist	R. Tackle	Stebbins
Watson	L. "	Amery
Vanderhoef	R. End	Fisher
Thompson, M. M.	L. "	Kimball
Tock	Quarter-back	S. Laitner
Beauvais	L. Half-back	Ansorge
Rider	R. Half-back	Quigley
Batsen	Full-back	Jones

Umpire, Prof. H. K. Vedder.

Referee, Prof. P. B. Woodworth.

Time keeper, Oscar Clute.

Score resulted 8-4 in favor of the juniors.

There was nothing in the game to which the most fastidious could take exceptions. The best of spirit prevailed throughout. The game was clean and manly. The players on both sides worked hard from start to finish and the honors were very evenly divided. The sophomores showed quicker action and more knowledge and training in the game. The juniors were heavier and were able to move the ball more by force than by skill. The "flying V" was worked very prettily by the sophomores and with good effect. All ran too high which induced a high tackle. Some one should learn to kick for the teams.

The individual work of Tock, Vanderhoef, Clark and Beauvais for the sophomores, and that of Ansorge, Fisher and Laitner for the juniors, deserves special mention. The game was a rebuke to those

who see in foot ball only a brutal contest where head-work goes for nothing and where all the possible inhuman acts are at a premium.

Flushed with their success, perhaps remembering the recent victory over '96 on the diamond, and perhaps taunted by some eager seniors, the juniors challenged the class of '94 on the following Tuesday to a game for Saturday, the 28th. The challenge was accepted and the seniors who could, began to prepare for the battle as it proved to be. No time was left to harden muscles and perfect telling plays. The game began while the elements frowned their displeasure. The seniors made the best showing at the beginning and bade fair to win at the end of the first half when the score stood 12 to 4 in favor of the seniors. One man had been laid off from each side on account of hurts. Others soon followed till the seniors team presented only a semblance of its form at the beginning. Scott and Poss were both badly hurt. The juniors began to make touchdowns almost at will but were unable to kick any goal. The game was reported as a slugging match and had some of the characteristics of such an affair as foul work was done on both sides. There are no extenuating circumstances attending such a game between two classes of the same college. There is no merit in playing such a ball and no honor in winning such a game. Among the commendable features were to be noticed the quick work of Scott in getting behind the opposite line and the fine tackling done by Phillips and Poss. The juniors worked a double pass with good effect and were frequently able to confuse their opponents as to the location of the ball. The positions of the players at the beginning were as follows:

'95.		'94.
Mitchell	Centre	Simmons.
Heck	R. Guard	Lewis.
Alvord	L. "	Newell.
Stebbins	R. Tackle	Welsh.
Normington	L. "	Leiprant.
Fisher	R. End	Allen.
Kimball	L. "	Phillips.
Laitner	R. Half-back	Scott.
Ansorge	L. "	Poss.
Amery	Quarter-back	Beese.
Jones	Full-back	Tracy.

Umpire, Professor Weil.

Referee, Mr. Wolcott.

Time-keeper, O. Clute.

Score 16 to 12 in favor of juniors.

COLLEGES AND EXCHANGES.

The total average expenses of a regular course at Columbia is about \$13 per week.—*Aurora*.

The oldest university in the world is said to be the University of Fez, the chief seat of Mohammedan theology in the eastern world.—*Aurora*.

The total membership of the Greek letter fraternities in American colleges is estimated at 177,000.—*Ex.*

The man who depends upon the spur of the moment, often discovers that particular moment hasn't any spur.—*Young Men's Era.*

Yale has started another reform in foot-ball. Her team this year will use rubber foot-ball spikes in place of the deadly leather articles previously used.—*Ex.*

"Say, mamma, we ought to have one of those buck-wheat-cakes in our nine."

"Why, my dear?"

"Cause it's the heaviest batter in town."

Mamma makes a base hit.—*Ex.*

Last year the United States spent \$155,000,000 for education, while Great Britain spent \$35,000,000 and France only \$25,000,000.—*Academy Student.*

Princeton's foot-ball have been in training at Gould's Island, near Newport; the University Pennsylvania eleven at Cape May, and the Yale team on Traver's Island.—*Ex.*

Smith College, after years of hard endeavor, has at last been granted by the faculty, permission to publish a paper to represent the institution. We wish them success, but are skeptical as to the chance of the paper flourishing under the faculty restrictions, which appear as numerous as the sands of the seashore.—*Aggie Life.*

At Boston University the faculty has voted to permit work on the college paper to count as work in the course, allowing seven hours per week to the managing editor and two hours to each of his assistants.—*Ex.*

"College marks, college honors, college courses, college degrees,—all these belong with the college cap and gown and laurel berries, to babyhood of culture. They are part of our inheritance from the past, from the time when scholarship was not manhood, when the life of the student had no relation to the life of the world." So says President Jordan of Leland Stanford University.—*Student.*

The endowment, wealth and annual expenditure of colleges and universities of the first rank may be estimated from their yearly income, as follows:

Michigan University	\$400,000
California University	270,000
Cornell University	500,000
Yale University	532,000
Wisconsin University	270,000
Harvard University	987,000
Columbian College	650,000
Massachusetts Institute Technology	267,000
Iowa University	125,000

—*Ossarist.*

We were once told by a reporter that the difference between a journalist and a newspaper man consisted in this: that "a newspaper man is a man who gets a salary, and a journalist is a fellow whom the city editor wouldn't have around at any price." The columns of the newspapers of to-day are eloquent witnesses to the truth of this statement, the lowered

standard which many of the great papers of the country have set is due chiefly to the absence of real journalists from the staff. All this is as it should not be, and the college that opens the way to an infusion of practical culture into the newspaper life of the country is deserving of encouragement and loyal support.—*Red and Blue.*



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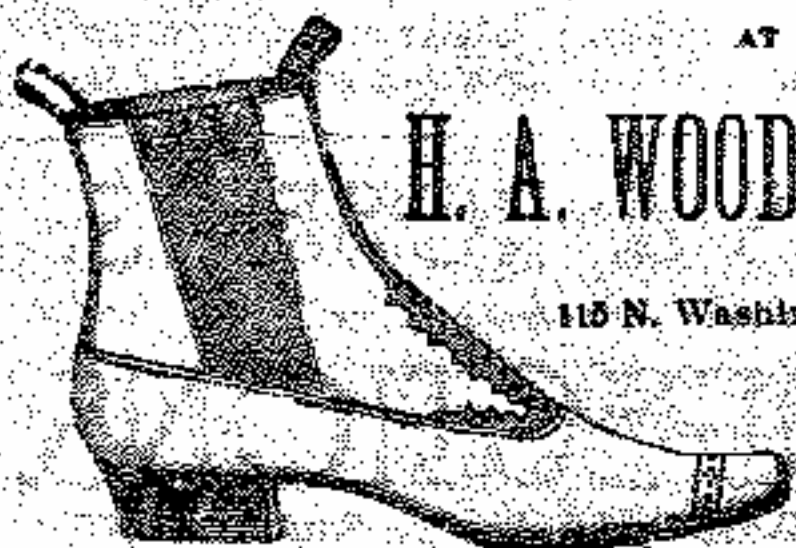
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