THE SPECULUM.

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The Soliloquy of the College Skeleton.

EXTRACT FROM CLASS POEM BY M. G. KAINS.

Here I hang from day to day suspended by my skull,

Be the classes grave or gay, my life is always dull.
When death pounced on my transient life and made it life eternal.

A surgeon hung my hard remains in this class-room informal,

Once I was clothed with flesh and skin, and auburn was my hair,

My form was plump and muscular, but now my bones are bare.

I hear the prof. talk of the parts I parted with long ago;

He speaks of tendons, teeth and lungs, and how my blood did flow.

Now tibia, femur, scapula, ribs, clavicle and skull Patella, ulna, vertebra, compose an aspect dull

But now and then a thrill of life comes o'er my manly frame

When the professor's back is turned the juniors play a game.

By dressing me in modern clothes to cover my shrunken shanks,

And with many more habiliments, they play their childish pranks.

Now I am a dashing dude in natty garments dight, And then an aborigine with clothing very light.

These little things remind me of the time when I had breath:

The smokers give me pipes to smoke—I swore off after death.

But little things please little minds, (the juniors still are young)

When they attain their senior year, they'll give such tricks no tongue.

The world still wags, but here I sway like a pendulum, no doubt.

Classes have come and classes gone since I "went up the spout."

Now I recall some anecdotes of the class of ninety-

Which memory in my empty skull will always keep alive.

These tales I hear as the doctor is looking o'er the roll-

Roasts, drives, puns, incidents; tough yarns, both grave and droll.

I'll just repeat them over while the manakin takes a nap.

The first I recall is the story of their sophomore class scrap.

Changes in Faculty.

As noted in the last number of THE SPECULUM, the State Board of Agriculture at their meeting during commencement week appointed Arthur B. Cordley to succeed U. P. Hedrick as assistant in horticulture in the Experiment Station.

The birthplace of Mr. Cordley was on a farm near Pinckney, Mich., where he first saw the light Feb. 11, 1864. His early schooling was obtained at the district school and later on he attended the village school. He remained on the farm until he was twenty-one years of age, when he entered M. A. C. in the spring of 1885. He was an earnest, faithful student and held a high rank in his class. He was particularly interested in the natural sciences, and during his senior year made a specialty of entomology, studying under Prof. Cook. During the winter vacations he taught district schools.

Graduating with the class of 1888, he was at once appointed assistant in entomology in the Experiment Station. He remained with Prof. Cook for two years, and his services were very valuable to the department, both in the Experiment Station and in the class-room and laboratory. In July, 1890, he was elected assistant in zoology in the University of Vermont. There, in addition to his college work, he lectured before farmers' institutes during the winters of 1890 and 1891. In April, 1891, he resigned to



ARTHUR B. CORDLEY

accept a position at Washington as assistant to the United States Entomologist, in the Department of Agriculture. While in this work he traveled through many of the southern States investigating insect injuries, and during the summer of 1892 made an extensive collecting trip through some of the roughest portions of Arizona, including a part of the Grand Canon. He resigned his position at Washington in April, 1893, and returned to his farm in Pinckney. He was married July 5, 1803, to Miss Mary C. McLouth, daughter of Dr. Lewis McLouth. President of the South Dakota Agricultural College, Brookings, and formerly professor of mechanical engineering at M. A. C.

During the winter of 1894-5 he did good work for the State Board of Agriculture and the college at several of the farmers' institutes. In the spring of 1895 he returned to M. A. C. to do

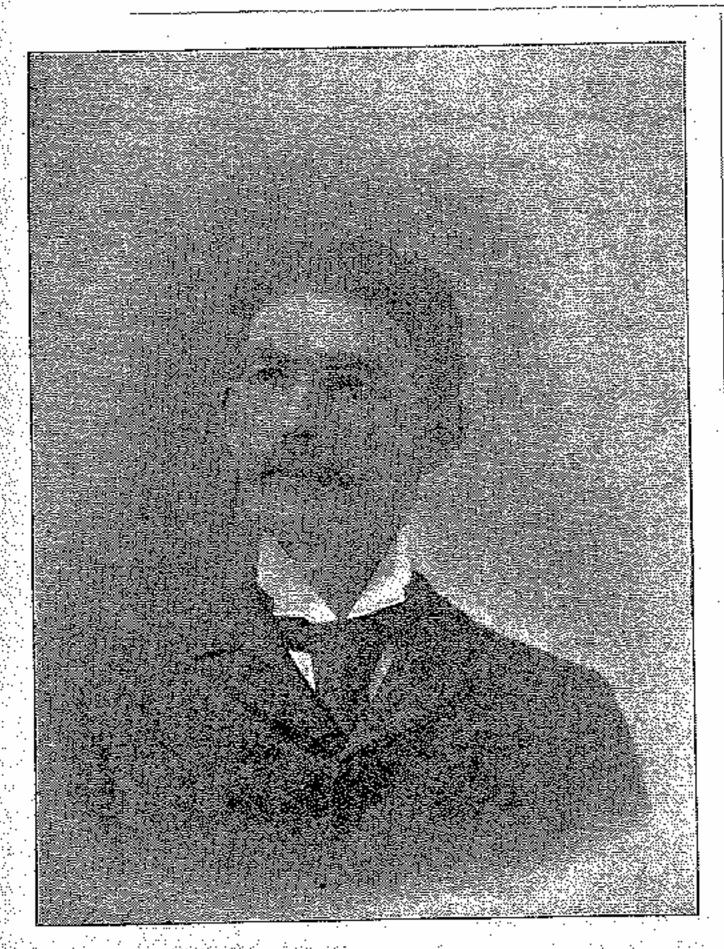
special work in botany under Dr. Beal, and on Aug. 15 was elected assistant in horticulture. Hardly had he begun his work when he was offered the position of entomologist of the Oregon Agricultural College, at a salary three times as large as he was receiving here. The flattering offer was too much to refuse, and on Sept. 7 he started for his new field of labor.

Professor and Mrs. Cordley carry with them the best wishes of their many friends here for their continued health and happiness in their new home in the Far West.

L. R. T.

Mr. Roscoe C. Bradley, the efficient assistant secretary of the college, was recently unanimously chosen by the Board of Control for the position as secretary of the Upper Peninsula Hospital for the Insane, located at Newberry.





HERBERT W. MUMFORD.

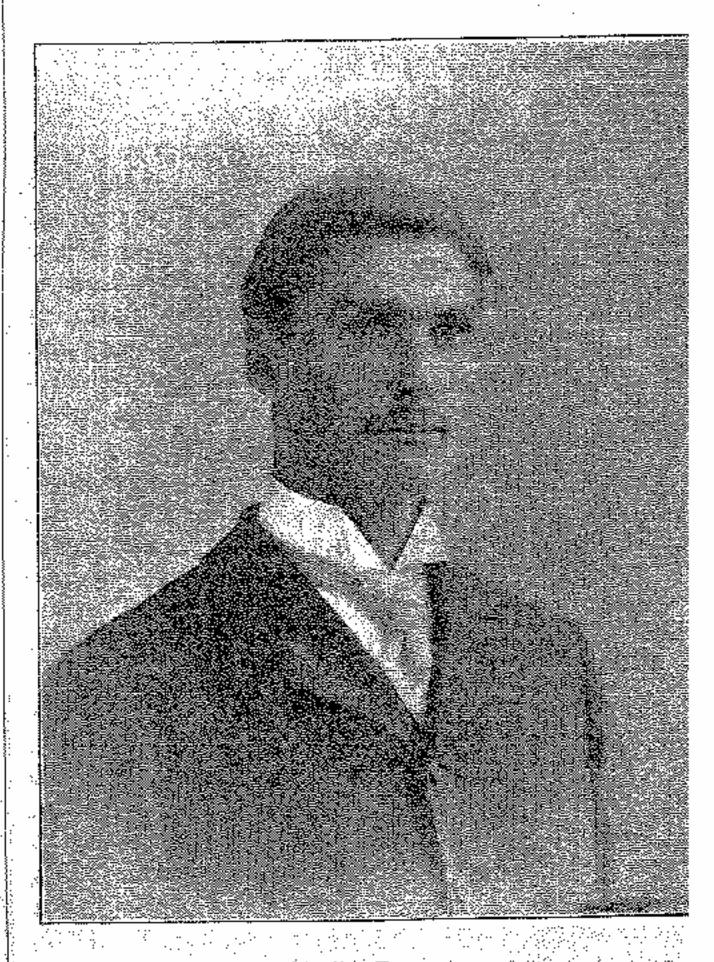
Mr. Bradley is a Michigan man, born at Port Hope, March 22, 1865. After completing a course in the schools at Port Hope, he began business as a clerk in a general store, afterward being promoted to charge of the office, in which position he remained nine years. was agent for the Adams Express Co. and operator for the Western Union Telegraph Co. In 1889 he was appointed by Hon. Harrison Geer as inspector in the custom house at Port Huron where he served until February, 1893, when he came to the M. A. C. He will enter upon his new duties about the first of October.

As assistant secretary of the college he has proved a very proficient officer, accurate to a degree, his books models of neatness; always accommodating and obliging. He carries with him the best wishes of every member of the college.

Mr. Herbert W. Mumford, who succeeds his brother in the instruction in matters pertaining to live stock at M. A. C., was born in Hillsdale Co. on the Moscow Plains in 1871. The foundation of his education was laid in a district school which was supplemented by a course in the Hanover High School where he was graduated in 1887.

The first two years of his college life were spent at Albion. He entered M. A. C. in the fall of 1889 and was graduated in 1891. His standing in college was very high indeed, in purely scientific subjects as well as those relating solely to to agricultural.

That his college course did not take away his love for farm life is evidenced by the fact that as soon as graduated he returned to the old homestead and interested himself in the management of the



M. W. FULTON.

farm until called to the work in his Alma Mater, this fall.

In his farming operations which were extensive, his specialties were Short Horn cattle, Shropshire sheep and Duroc Jersey swine. The acreage of grain especially of wheat was large and Mr. Mumford has the prestige of the successful management of a large grain and stock farm as a recommendation for teaching practical agriculture.

He had a good deal of experience in judging different breeds of live stock at fairs, which will be of great value to the students who receive his instruction.

It is the aim of the Farm Department to turn out graduates who shall be conversant with the practical details of farm work and the selection of men of high educational qualification combined with long and varied successful practical experience in farm work, as instructors cannot fail to bring about this result.

C. D. S.

Mr. M. W. Fulton, who succeeds Mr. A. T. Stevens in the work of the Farm Department was graduated at M. A. C. in 1895. Like the other members of the teaching force of this department, Mr. Fulton has spent his life, except when at school, on the farm. He understands therefore the ins and outs of farm life and the multitude of little details, on the successful management of which, the profit in farming so largely depends.

After leaving the district schools of Wayne County he spent two years in the high school at Wayne and came from there to M. A. C. where he took the full

four years' course.

The work Mr. Fulton has to do will call into requisition his best powers. The work on a modern farm is done almost entirely by machinery. While the physical principles involved are not difficult to understand, the methods of application are so various and the difference in economy between different machines is so great that a special course in farm machinery is being inaugurated. It is the first duty of Mr. Fulton to reduce the

instruction in this line into something like pedagogic form. He will also have charge of the details of the execution of the experiments. His energy and enthusiasm, with his college training and practical farm experience, especially fit him for the work. C. D. S.

American Citizenship.

PRIZE ORATION DELIVERED AT INTER SOCIETY CON-TEST BY CHAS 'M. ALVORD, PHI DELTA THETA FRATERNITY.

In the great drama of national life there are many scenes and many actors. All have their alloted time and place, and the record of their deeds and motives makes up the ponderous volumes of history. In the third act of our national history, there was performed before the American people, a tragedy, the influence of which will last throughout ages yet to come.

The actors were two Americans, equal in ability, opportunity and scholarship, but far different in those finer qualities that tend to make a man what he really is, — Alexander Hamilton and Aaron Burr: Four score and ten years have come and gone since then, yet time only brings out more clearly the contrast between these two men, and to the student of history they serve as a striking representation of two classes of men of the present time. Hamilton—the American statesman. Burr—the American politician.

It may not be out of place just here, to draw a distinction between a man that may be called a statesman, and one that is a mere politician. A man to be a great statesman must be conversant with history and understand the motives and principles that actuate other men. He must be a man that sees things not only as they are to-day, but with prophetic eye can look into the future and see the result of to-day's action.

The true statesmen are those that have the interests of the whole nation at heart, rather than those of a single State.

Lodge says, "there are two classes of statesmen. Those who are great in their calling and those who in addition represent great ideas." The former are less conspicuous, but no less necessary; they are the rank and file. The latter are the leaders of which Hamilton, Jefferson and Adams are representatives. It was their fortune to be instrumental in founding this great nation and shaping its course. Their services cannot be overestimated. The debt of gratitude due them from the American people can never be paid.

To be a mere politician one need not necessarily be an educated man. qualities are generally selfishness, disregard for the rights of others, narrowness, cunning, deceit, and oft times treachery. He is a man that turns everything to his own advantage, and schemes, plots and plans for the aggrandizement of his own interest and power, even to the detriment of the State. He places self interest above that of the nation, and instead of doing something for the people wishes the people to do something for him. This was the character of 'Aaron' Burr. Incensed and chagrined at his political defeats which he credited to Hamilton's influence, he secretly and cunningly began to plot the murder of this man whose death could only bring down upon him the anathemas of an enraged people. The challenge for a duel is sent and accepted. It is a beautiful morning in July, when they meet on the banks of the Hudson for the fatal contest. The golden rays of the morning sun are just appearing in the eastern horizon. The fleecy clouds hang motionless in the sky like white tents pitched on the blue fields of heaven. A sharp pistol shot rings out in the clear morning air, and America's greatest statesman lies bleeding and dying a sacrifice upon the altar of a baneful custom. Burr went forth unharmed to engage in abortive treason, and "became a wanderer and an outcast on the face of the earth."

Alexander Hamilton may be taken as a true representative of the ideal American citizen. Educated and refined as he

was, he did not withdraw himself from the public world, but rather gave to his country the best service at his command. To say that he was an American statesman is the truest representation of his character. True he sought office, but "office and power was to him a means to an end, and this end was the good of his country." He upheld the dignity of American citizenship.

A thing to be prized and valued must cost something, and the greater the cost, so much the greater is the value. The prize of American citizenship has fallen far from the place it once occupied because of the ease with which it is attained. While we gladly welcome to our shores any, who may wish to become true and loyal subjects of Columbia, nevertheless there is danger in the promiscuous dealing out of the title of American citizen to all who merely ask it.

Columbia points with pride to many of her adopted sons and daughters, but there is another class whose power is great and influence malignant. They have no patriotism, they wish no government, and are a menace to peaceful prosperity.

The Russian nibilist "cradled in the lap of anarchy" is here. The German peasant with socalistic teachings; political and criminal outcasts from the dense of Austria. Italians, whose hearts so easily inflamed, "with the fury of a tiger that has tasted blood, blazed upon the slightest provocation." All these and more are here. They are not representative men of their respective nations, but those whose wild and pernicious aims were hampered by the laws of their mother country. They read of free America and they imagine it is a land of unlicensed liberty, but when they come here and find that law is exalted as the supreme protector of our institutions, that one man's rights and liberties extend only so far as they do not infringe on the rights of others, they regard it as a burden and a restraint and congregated in the great cities, dissatisfied with this form of government, they furnish ready means in the hands of the "political boss" for the cor-

The caucuses are run as he directs, the votes are cast as he wishes, and the appointive offices are dealt out as may best suit the interests of the "ring." The educated and refined scholar whose political decisions are the result of careful and considerate reflection, sees his votes offset by that of a miserable wretch who has sold his vote for a glass of beer. Is this condition of affairs the result of the guidance of American statesmen? Nay, far from it. It is the result of American politics and the schemes of American politicians.

Nevertheless the evil is present with us and the duty of righting this wrong rests with the virtuous and intelligent American citizen. He should shoulder more of the responsibilities of government. He should feel himself under obligation to vote on account of the very fact that this right is given him. He should attend the primary meetings and rescue the political machinery from the hands of selfish and scheming politicians. Can be expect to inaugurate reforms by idly folding his arms and neglecting his duty, or to purify politics by leaving them in the hands of the ignorant and vicious? Ehere is need of a higher standard of citizenship among intelligent classes—a standard that has more devotion to prinexple, more eagerness to see justice prevails a standard that teaches men to lay aside selfish interests and pleasures, and to devote a few valuable moments to service for one's country."

As "night brings out the stars" so does the necessity, or a great crisis, bring to the surface whatever there is good or loyal or patriotic of American citizenship. Patriotism for the most part lies dormant in the average human breast. It is a smouldering ember that needs only the breath of foreign insult, or internal turmoil, to fan it into a living flame.

Abraham Lincoln had but to issue his call for volunteers, and from shop and mill from farm and college hall, the noble

sons of America came forth with proud and valiant step, to die, if need be that their country might live. "The plow lay rusting in the furrow, and the waving grain on many a hillside waited in vain the reapers scythe. The student laid aside his pen to grasp the saber, and he who in the pulpit wielded well the spirit's sword, put forth his hand and grasped the trenchant blade of steel. From pit and mine they come forth as if the very earth were giving birth to heros to defend the cause of freedom," and on southern battlefields they poured forth their lifeblood, as freely as any who fought with Washington or Hamilton in the dark and desperate days of the revolution.

In every State, in every city, in every hamlet, from hundred harbored Maine to the Golden Gate, there dwell to-day men and women who no less obedient to their country's call, would sacrifice self upon the altar of dutiful devotion, and pouring forth their life-blood for the upholding of America's freedom, greatness and glory, still with their dying breath would say, "What pity it is we can die but once to save our country."

Yet while America does honor to a countless number of heroes—fixed stars that will ever shine with increasing brightness—while she has never called for defenders, and found them wanting, it is no less the duty of all, even in times of peace, to foster this spirit of patriotism, and to uphold and defend the principles of our republican institutions.

America needs to-day a higher standard of citizenship and a better class of men in the public service; less political debauchery and bribery, less selfishness in public life, and more of that charity that teaches one to observe a due regard for the interests and welfare of others, then would all the States—"with a broad and perfect lovalty that loves and trusts, Georgia alike with Massachusetts," that knows no North, no South, no East, no West—unite in praising the purity—moral, social and political—of this land that pays homage to but one ruler.

The Typical Sophomore.

W. M. BACKUS, OLYMPIC SOCIETY.

Of the hazing and initiation of freshmen at our schools and colleges, much has been said, but however interesting the topic may be to some, perhaps there is none to whom it brings more delight than to our subject—the typical sophomore.

From the beginning of his career to the last moment of the short year in which he is a sophomore, he considers it his supreme duty to instruct the freshman in those lessons, necessary to his pupil's future welfare. Believing that "Cleanliness is next to Godliness," he endeavors to keep this valuable precept constantly before the mind of the new comer, by supplying him with plenty of fresh water through the shower-bath, being of course the healthiest and most invigorating of all baths for the freshmen.

"Order is heaven's first law," and this must be firmly impressed upon the mind of his young friend by frequently putting the new comer's room in disorder so that he may learn to value the wisdom of

putting things in their places.

The sophomore teaches the new comer many valuable things, and leaves him to find out the great difference between the air castles which he builds before entering college, and the paper-sacks that he sees flying through the atmosphere near himself, when he first arrives on the college grounds. The freshman attempts to get a square meal, but the sophomore knocks off the corners by hurling crackers at him. He tries for a different seat at the next meal, but the sophomore has kindly put a watery cushion in his chair, which unfortunately is the only vacant one: and he must sit down and make the best of it, while a sober looking sophomore next to him calmly asks him how be likes college.

So much for the typical suphomore and his gentle relations to the freshman receiving his first idea of college life.

But habits once formed are slow to be abandoned, and so it is with the relation existing between freshman and sophomore from the first day of the career to the last; there always persists a feeling of duty on the sophomore's part, and of watchfulness on the part of the other, all of which is a source of amusement for the upper classmen as well as the sophomore; as they see, for instance, the look that spreads over the freshman's face when he is told to p-l-e-a-s-e dance.

Let us look now at what the sophomore really is. We have noted a few of his relations to the freshman in the line of his personal amusement, but the typical sophomore must not be considered as a person doing nothing in college except taking the advantage of his course

for a season of enjoyment.

In most colleges, the sophomore year of a student is that portion of his college life in which he first becomes a real student and is doing the most for himself. It is in this year that he generally completes his mathematics and begins the elements of all the higher sciences. In fact, it seems to be a general opinion that the sophomore year at college is the most difficult year that there is in the course. From this we conclude that the sophomore as he is known to the freshmen, and the sophomore as he really is, are two very different persons.

The old time class-fights such as have characterized many of our eastern colleges and some of our western ones, is a barbarism now growing less frequent, though not entirely out of date. But wherever this does exist, the sophomore with his little band, must oppose the numerous freshmen or consider himself

conquered by the challengers.

Such things ought to be entirely abolished, for as long as they continue to exist, there will exist a strong menace to good order and faithful work.

What the typical sophomore ought to be, is a question more easily asked than answered.

The freshmen in answering this question, would show a needed reform in the

lives of sophomores, while the sophomore himself would seek his ideal by more kind attentions to the initiation of the freshmen, but whatever be its true answer, it should not be a discouragement to the level-headed energetic young man who is contemplating taking a college course. Too often a student refrains from entering college for fear of the indignities and even barbarities portrayed to him by the exaggerated statements of a student who has spent only a few days within the walls of a college. This class of temporary students do more to keep men away from college than our typical sophomore does to make it unpleasant for him upon his arrival.

The typical sophomore cannot be confined to last year's class, to this year's class, or to any particular class, but he is found in all classes, and wherever he is, we will generally find him a lively entertainer, and a source of interest to all with whom he has to do. But of all his associates he is to the freshmen, the most

interesting.

SCIENTIFIC.

Report of Natural History Society.

Society for the fall term was held Sept. 6. Prof. Barrows gave a highly interesting and instructive talk on "Personal Experiences among Birds and other Animals of the Argentine Republic." He obtained many specimens in the vicinity of Concepcion on the Uruguay river where he spent fifteen months as instructor in the national college located at that place. The Argentine Republic supports a "national college" in each of its provinces.

In speaking of birds, he said that migration takes place there as it does here with the exceptions that in the former case the birds go north instead of south to find warmer weather; and as the seasons are exactly the opposite of ours, autumn migration there takes place in the months which constitute our spring.

The South American ostrich (Rhea Americana) was the first bird described. In size it is smaller than the African ostrich and differs somewhat in habits. Another point of difference is the number of toes, the foot of the South American ostrich having three toes while that of the African bird has only two. The birds are found in great numbers intermingling with the vast herds of cattle and sheep on large stock farms, or estancias. They have no great value except as food, the Indians in the southern part of the republic living largely apon them. The feathers of single bird are worth from one to two dollars, and are used in making feather dusters. When the time for breeding approaches the male bird prepares a kind of nest by scratching a hole in the dry earth. The females lay their eggs in the vicinity of this hole and it is the duty of the male bird to gather in the eggs and arrange them so that the sun will hatch them. The birds are captured by the natives by means of the characteristic native weapon, the bolas. Partridges, so called (Tinamous), in size resembling the Virginia quail, are abundant. These are captured in great numbers and sold as game birds. Most of the birds taken are caught in a very ingenious way by native boys. Mounted on a horse, a boy rides out armed with a weapon consisting of a cane or fishing rod pointed with the quill of an ostrich feather at the point of which is fastened a slip knot. As the boy approaches a bird it is almost sure to squat down instead of taking to flight. He rides by and then circles around it getting closer each time until having come within the right distance he slowly lowers the slip knot over the head of the bird, jerks it up to the saddle, wrings its neck and drops it into a bag prepared for the purpose. Often the birds are kept alive and exposed for sale in the markets in coops. like chickens.

In the swamps of the Uruguay river the roseate spoon bill (*Platalea ajaja*) is found. It is a bird about the size of a duck and as the name indicates has a beautiful roseate

plumage. The bill is long and somewhat spoon shaped, well adapted to gathering up food from beneath shallow water. A peculiar feature of the bird is that it cannot walk on the land without swinging its head from side to side. This is probably owing to the fact that this motion is constantly kept up when in search of food.

Farther south, near the Patagonia border, the flamingo (*Phænicopterus*) is a common bird. It is ordinarly considered to be a tropical bird but here it may be seen in the salt or alkaline lagoons when the water near the shore is covered with ice from an eighth to a half inch thick.

A very graceful and beautiful water-bird is the surgeon (Parra jacana). Its body, which is about the size of a robin's, is cinnamon brown, while its wings are pea green and black. By means of long, slender toes the bird runs easily over the water, supported on the floating leaves of aquatic plants. At a little distance the leaves are not visible and the bird appears to be running on the surface of the water.

Perhaps the most wonderful birds described by Prof. Barrows are the thorn-birds (Synallaxidæ) of which there are thirty or forty different species. The birds usually attach their nests to the limbs of trees. One species begins the process of building by first weighing down the branch by a great bunch of sticks, thorns, etc., until it has an accumulation that in some instances is so large that it would not go inside of a lime cask. Then beginning at the lower extremity, the bird works a hollow space into the interior and lines it with wool. Often several nests are attached to the same tree, weighing its branches down almost to the ground. species of thorn-bird has some peculiar feature of its own in the manner of building its nest. One species, instead of attaching its nest to the branch, builds it around the stem of the tree, the passageway to the nest being in the form of a corkscrew, sometimes encircling the treetwo or three times. The exterior as well

as the interior of the nest bristles with thorns, making it very difficult for intruders to get at the part of the nest where the eggs are hidden. Large lizards (*Iguanas*), are their principal enemies.

Jaguars (Felis onca) are abundant in the jungles along the Uruguay. Their favorite food is the water-hog, or carpincho (Hydrochoerus capybara). The shores of the river are lined in some places with the bones of these animals, killed by the jaguars.

Another animal is the nutria (Myopota; mus coypu). It is a water-rat about twice the size of a woodchuck, and bears valuable fur.

The hairy armadillo (Dasypus villosus) is a common but very peculiar animal. It is nocturnal in its habits, and its head and back are covered with a very hard, tough shell which affords the animal great protection. It is used for food and is considered a great delicacy, in spite of its repulsive appearance.

Prof. Barrows told many other interesting facts about the animal life of the Argentine Republic, besides describing the country and giving a brief account of his trip to the South American continent. During his stay at Concepcion he collected some two hundred species of birds and a smaller number of mammals, besides some reptiles and insects. Before returning to the United States he spent four months with a government party making a biological survey of the Pampean Sierras, near the southern limits of the province of Buenos Ayres. Some of the specimens collected on this trip were lost, but the majority were turned over to the Argentine government.

G. C. Davis gave a short account of the American Association of Economic Entomologists attended by him on Aug. 27 and 28. While in Massachusetts he visited the Gipsy Moth Commission, a description of which he has written for the scientific department of this paper.

A number of general observations completed the program for the evening.

A Visit to the Gipsy Moth Commission.

Moth Commission at Malden, a few miles from Boston, on my recent eastern trip to the American Association of Economic Entomologists. This commission was established some five or six years ago by the State of Massachusetts for the extermination of the "Gip," or Gipsy moth. It has already spent several hundred thousand dollars and the end is not yet. The moth is one of the worst pests ever found on our shores and we watch with the most anxious interest the result of the work.

About twenty-five years ago a Frenchman at Boston imported a few caterpillars from Europe to experiment on their silk producing qualities. He was cautioned at the time to be careful and not let any escape, as they were known as a bad pest in their native home. Unfortunately some did escape, and soon the trees and plants in the region of the home of Trouvelot were stripped of foliage, new colonies in other places were formed and their destructive work went on. No systematic work was done to stop their ravages and they continued to increase in numbers and spread, eating almost every green plant before them. In 1890 the commission was appointed and \$50,000 was appropriated. Then the fight com-menced in earnest.

The moths had spread over an area of from 25 to 50 miles in diameter, which included the city of Boston and its suburban towns and skirted with cultivated farms and rocky land on which stand forests and dense undergrowth. The caterpillars are known to have over 250 food plants on their bill of fare, and this includes all fruits and vegetables from the garden, farm crops and leaves of the forest trees. Many people were glad to aid the commission in their work, but the people of the suburbs and in town, who had as yet suffered none or but little, were annoying or resistful. These were some of the conditions under which the commission has done its work.

There is but one brood of the moth each year. It is in the egg stage now and remains over winter in that form. In May and June the caterpillars are at their worst. In August the moths appear. The commission fights the "Gip" in all its stages. They spray for the caterpillars, hunt for the cocoons and eggs on the bark of trees, on the limbs, on houses, under rocks and rubbish, and all other places where they can be concealed, and destroy all the moths that can be caught. The most successful work at present is being done on the eggs as they are laid: by the female in clusters of about 500 under a brown network of silken threads that makes them readily detected by an experienced eye. When found they are treated with a few drops of creosote oil which penetrates them and destroys their fertility. In this way millions of clusters are destroyed annually by this gang of men.

The Gipsy moth has spread but little since the commission began its work and it now is apparently exterminated in many places where it was found abundant at first. In other places a few are found each year, but they are diminishing under the watchful eye of the expert. Occasionally a new place is found where they were not known to be before. There must be perseverance yet for several years, but indications are that the commission will succeed if the State will contique to give them the means. whole work is unique as it is the first instance of extermination on an extensive scale that has ever been tried. doubly interesting because of the work being on such a destructive pest.

G. C. Davis.

A Friction Brake.

A friction brake to be used in connection with the shop engine for experimental laboratory work capable of absorbing and indicating fifty horse power is one of the recent constructions of the Mechanical department. The brake is after a design of

Prof. Carpenter of Cornell University and is essentially composed of a copper tube which encircles the fly wheel of the engine and has water connections which allow the pressure to be applied and the heat of friction to be carried off by the water. The adjustment is made by properly setting the inlet and outlet valves on the water connections. A sheet iron band encircles the copper tube to prevent its expanding outward and the tendency to revolve is prevented by a long arm attached to the sheet iron and recording on a pair of scales the effort exerted.

Test of the Deering Corn Harvester.

The Farm department made a careful test of the Deering corn harvester, Sept. o, in corn on field No. 9 of the College farm. The part of the field selected for the test is practically level. The corn, which is comparatively even and of a good growth, is of the Davenport white dent variety planted in check rows. In all four tests the draft of the harvester were made, which are as follows:

| Distance, | Time. | Av. draft, | Average |
|-----------------|-----------|------------|---------|
| ≸œt. | ຣະຕວດປ່ຽ. | pounds. | M. P. |
| Pirsi test 218 | 50) | 325 | 2.5 |
| Second test 235 | 49 2-5 | 276 | 2.4 |
| Third test SH | 53 1-5 | 3696 | 2.5 |
| Fourth test 222 | 49 1-5 | 319 | 2.5 |

The average draft for the four tests is represented by 2.5 H. P. The weight of the machine is 1142 pounds.

Prof. G. C. Davis was sent as a delegate to the "American Association of Economic Entomologists," held at Springfield, Mass., August 27-8. He read a paper on "Our Most Destructive Foes in Michigan for this Season." Over forty papers were read from entomologists representing nearly all parts of the United States. He also visited the "Gipsy Moth Commission," at Malden near Boston, and the State Agricultural College at Amberst. The following week Prof. H. K. Vedder, as a delegate from the college, attended "The Association for the Promotion of Engineers of Education," held at the same place. This is a new society founded in 1893, at Chicago during the world's fair. The principal questions discussed were: entrance requirements for technical courses, the proper balance of studies, and the equipment of interatories for professional instruction. Both report a large attendance, and a pleasant and profitable meeting.

THE SPECULUM.

PUBLISHED MONTHLY DURING THE COLLEGE TEAR, BY THE STUDENTS

OF THE MICHIGAN STATE AGRICULTURAL COLLEGE.

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AGRICULTURAL COLLEGE, SEPT. 15, 1895.

Local Field Day, September 21.

THE SPECULUM extends greeting to the class of '99.

We note with pleasure that the Columbian Literary Society has been admitted to the Oratorical Association, which now includes all of the open societies for gentlemen.

THE SPECULUM sends congratulation to a former editor, D. D. MacArthur, who was married, August 21, to Miss Rebecca M. Philp. May you have countless joys and a faultless home,

THE fact that the Lansing electric railway has lately changed hands is a matter of much interest to those at the college. Does it mean the improvement and extension of our line? We hope so.

PROBABLY nothing has been done about the campus that is more conducive to the good sanitary condition of the dormitories than the improvements which are being made in Abbot Hall. All praise is due to the State Board. Let the good work go on.

THANKS to Editors Herrmann and Briley, we again have humorous and exchange departments.

The educational labor, as outlined in our last issue by Prof. Smith, is proving satisfactory to instructors and students alike. The student labor question has been a most perplexing one and we hail with joy anything that points towards its solution. The scope and variety of the work is so great, however, that the four instructors are unable to give to each student the amount of personal attention necessary to the best success of the system, and to meet this deficiency they will. with future classes, call to their aid those from the upper classes who were most proficient in the work when they took it, and will pay them for it. This should stimulate those who are now doing the work, for they are the ones from among whom these tutors will be chosen.

RECENTLY some steps have been taken by the Students' Organization to establish an M. A. C. glee club. The idea is certainly very plausible and we hope those who have the matter in charge will push it to completion. Other institutions do so, why can't we? Our boys seldom do things by halves, as our repeated successes in athletics testify, and our students are at liberty to attend to such work during the winter season - just when lectures and concerts are most popular. Our instructors endeavor each winter to put themselves in touch with the people by conducting institutes throughout the State, and this would be of value in the same way. Indeed, it might very easily be made an auxiliary to their work if proper arrangements could be effected.

In a college like this, where there are practically no lady students, athletics easily become pre-eminent as an amusement and should be in every way encouraged, both for the physical strength and vigor they give and for the good health they insure. Physical training is fast gaining favor with modern educators. A strong physique is an essential auxiliary

to a strong mind, and it is to be regretted that with us this fact is not recognized by the powers that be. It has been a long time since athletics were at so low ebb as Our teams are disbanded, our athletic supplies are out of repair and our track overgrown with weeds-not because of a lack of proper athletic spirit among the students, but in a great measure due to those discouraging rulings which prevent our teams from playing, except on college grounds; which deny us the time we need for training; which refuse us the use of team and tools to repair our track, and in various ways dampen the ardor of our athletics. The faculty athletic committee has promised some effort in our behalf; and in the meantime let all come out on Local Field Day and do the best they can, hoping that this cloud has a silvery lining.

Dr. R. C. Kedzie attended the annual meeting of the "Official Agricultural Chemists of the United States," held at Washington, D. C., Sept 3, 4 and 5. This association has charge of fertilizers in particular. Ex-President Willets gave a pleasant talk and encouraged the work. This was followed by an address: delivered by J. Sterling Morton, secretary of agriculture. He called attention to the depressed condition of agriculture in America, the large production of wheat in Russia for the last three years, and the lact that it is still held by the farmers for better prices. To lessen the burden the Russian government have loaned to the farmers funds for immediate use, taking the stored wheat as security. But the grain is so cheap that it will not now pay for the loan. He read a letter from his agent at Odessa, stating that seventy-five to one hundred bushels per acre was not uncommon. For the American farmer to compete with this enormous production is discouraging. In the Argentine Republic large quantities of wheat are in store waiting for prices to raise. This year Argentine has shipped two hundred and forty-five thousand fat cattle to England. Thus partially checking our foreign meat trade. The following subjects were discussed: Analysis of fertilizers, food products, fodder, sugar, liquors and tannin material. The doctor visited the plats of forage plants that are being cultivated in this country. It contains species from Russia, England and Argentine, and was a fine display. At his request Secretary Morton sent a messenger to bring in the winter whear alloted to Michigan. A small bag containing nearly a pound was brought forth. The two and one half days were well filled with profitable and interesting discussions. Seventy delegates were present, this being the largest convention ever held.



Kedzie of Manhattan, Kansas, is visiting at Dr. Kedzie's. She has just returned

improved.

Miss Nellie

from a tour in Europe.

August 24-The Wescots have a son-Frank Nelson.

Miss Pearl Kedzie has returned to Olivet to resume ber studies.

Mrs. O. Clute is visiting her brother, John Merryless at Chicago.

Miss Pearl Kedzie entertained a few of her friends the evening of September 6.

Mrs. Vedder and daughter, Marcia of St. Johnsville, N. V., are visiting at Prof. H. K. Vedder.

Miss Lillian Wheeler has a flourishing kindergarten school. The enrollment includes many of the faculty children.

Mr. D. J. Crosby has taken a bicycle trip to Battle Creek, where he will spend the Sunday as a guest of Ex-Senator Mayo.

A college directory will soon be out, numbering the residences on faculty row. It will be a great conventence to visitors in locating the college population.

Mrs. Philip Woodworth entertained a few of her friends in honor of Kathy Marion and Ed. Clute. In the pea-nut contest, Mr. Joe Merkel captured the first prize with Mr. Bradley as a close second. A pleasant evening is reported.

The new street car company is doing business. Cars run every twenty minutes, twelve tickets for sixty cents, and half fare the the college school children.

The board of State auditors presented to the college a perspective map of Michigan, fourteen by fifteen feet. The pedestal is constructed from wood used at the world's fair. The original cost of the map was fifteen hundred dollars, and it will be placed in the library hall.

Mr. R. H. True, a graduate of the German University at Berlin, is here visiting his brother, Gordon.

E. D. Osborn, with the class of '97, made the college a visit August 21. He has recently received a degree of F. D., from the Indiana School of Embalming.

J. R. Petley, with '96, visited the college and Lansing three weeks during July and August. He is now in business with his father in the "Petley Shirt Co." of Milwaukee.

At a recent meeting of the Students' Organization, it was decided to try and organize a college musical club. A committee was appointed to consider the matter and collect material.

Owing to the departure of Mr. Eastman, Ed. Gallup was elected to fill vacancy as vice-president of the Students' Organization. Mr. Gallup is also base ball manager.

Friday evening, August 30, occured the Y. M. C. A. reception to the new students. After the program divided quotations were distributed, and upon the matching an immediate adjournment to a corn-roast was in order. Needless to say a fine time.

Dr. Grange has gone to Coldwater to try the tuberculose test on cows that furnish milk for the State. Public School at that place. He is granted leave from the college October 1, to experiment on the microbes in the laboratories at Ann Arbor. The veterinary class in the spring will devote considerable time to this subject.

Sunday. August 18, the new bridge on Michigan avenue allowed cars to cross. It has been about ten months since the old bridge was torn down. We can now ride clear into the city, even if we are obliged to foot it half a mile at this end of the line. We hope it will not be many summers before the car line will be extended to the library.

For several years past the agricultural seniors have been favored with a trip to Mr. H. P. Gladden's peach farm. It has been the cry that we should be given more educational work and less of the drudgery of hoeing the drives and raking the lawns. More or less of all the work is instructive and interesting, but the afternoon spent with Mr. Gladden caps the climax. It is the sentiment of the class that California peaches may surpass those growing in Michigan for size, but never in flavor.

Prof. H. C. Harrison received a box of grapes from A. L. Free, with the class of '88. Herb. says "Many thanks, come again."

Mesors. Pashiy and Newell entertained the Olympic Society Saturday evening, September 7. Goodwin's pug dog and fruit were the drawing cards.

Saturday afternoon, September 7, a basket picuic was held in No. 7, along the river bank. The friends of the co-eds report a very pleasant outing.

Kenyon L. Butterfield has spent the summer in erganizing farmers' institutes. This winter sixty-five to seventy will be held, about six being in the upper peninsula.

Mr. A. B. Cordley, assistant on the Horticultural department, has received a call as Professor of Ento-molegy at the Agricultural College, Oregon. His salary grew from five to fifteen bundred.

The Zoological department bave purchased two compound microscopes and a file-case for the keeping of zoological notes. An insect proof case for the collection of bird and mammal skins will also be added.

Fine mounted specimens of the blue winged goose and black bellied ployer, have just been added to the museum through the kindness of Mr. Percy Selores of Greenville, Mich., where the birds were shot. Both are somewhat rare in this State.

Sunday, September 8, Messrs. Good and Longyear, while out for a stroll saw a large fox squirrel apparently in a fit. It soon afterwards died. Prof. Barrows made a post mortem examination and discovered that the brain was slightly inflamed and cularged.

The Freshman class now numbers about 48. About 30 of these are usechanicals. The class may lack in numbers now, but the per cent. who graduate will no doubt be far alread of all present classes. The mechanicals are reported as being especially apt at drawing

The library into recently purchased a case for the seven volumes of the century dictionary. It is a great convenience, saves lifting the large books and preserves them from table wear. The shelves are fast being filled with new books, and in a year or two additional space will be necessary.

Dwight S. Cole, mechanical of 'ot, spent a few days at the college recently, assisting in the work of remodeling the heating plant of the library building. Mr. Cole found that the weather bureau work in which he has been engaged during the past eight months did not pan out as expected, so be tendered his resignation to take effect August 31, and will enter engineering lines again.

RECHANICAL DEPARTMENT.

A new set of hardened mandrels, from one fourth to one and one-half inch, are just finished.

During vacation the line shafting was overbauled and three ball bearings were put in to take up thrust in the shafting.

An iron stairway for the foundry will be constructed leading to the cupola. It will be used to charge the same previous to taking a best.

An apright Oids engine from the boiler house, formerly used in running the dynamo, is being remodeled and rehabilitated and will be used in the testing room.

YARM DEPARTMENT.

A new Deering corn harvester has been purchased.

The three experimental silos are being filled with millet, rape and corn.

Three varieties of Corean millet are doing well, some as high as six feet.

Mr. G. H. Trus will do the dairy work in the upper peninsula during the farmers' institutes.

One hundred rods of Page wire fence have been purchased for the new lane along the river.

One hundred and sixty tons of allage have been put in the silo. The cost being about seventy-two cours per ton.

A new crystal creamery, made at Lansing, is fulnished to the dairy department in the cold selfing process for the raising of cream.

The new experiment station barn is completed. It contains a seed room, a four ton Fairbanks scale, and stalls for the storing of test wheat.

One hundred and twenty-five grade coarse-wool lambs have been purchased for feeding experiments this winter. They are now feeding on rape in No. 18.

The experiment station is sowing ten cross breed wheats from Australia. Hungaria and Buda Pesth. Dawsons's Gelden Chaff will be the main crop but an seed of this variety will be distributed this year as it all contains smut. Sixty acres of wheat will be sown this fall.

Prof. A. A. Crozier has been to Ontario, Canada, two days looking for Golden Chaff wheat free from smut. He visited the farm of Robt. Dawson near Gault, from which it originated, but secured no wheat. In the tests here for the yield of wheat the Golden Chaff led with 15 bushels to the acre, Red Clawson 13, and Dehl Mediterranean 12. Currel, a variety introduced from Kansas, failed completely here on all soils but in Kansas and Maryland this wheat takes the lead in yield.

STATE FAIR.

The farm department exhibited specimens of rape, grass seed, and eight varieties of wheat grown on muck land.

Mr. McCallum a graduate of Guelph, Ontario, Canada, is here taking a post graduate course in German and botany, parasitic fungi being his special line of investigation.

Mr. Jaroslaw Niemets, sent out as agent of the Russian counsular service, is here examining the conditions and methods of fruit culture. He will visit several of the important fruit growing sections in this and adjacent states.

Profs. Taft and Beal will go to Traverse City to attend the autumn meeting of the State Horticultural Society, which is to be held in connection with the county fair, Sept. 24-5.

The mechanical department were represented by milling-cutters, remers, gear wheels, pulleys, patterns, blacksmith shop exercises, rough castings by the foundry, and drawings.

The South Haven exhibit of new varieties of peaches, plums and pears attracted considerable attention. The Kingston, Grand Duke and Black Diamond plums were regarded as very promising.

Weeds, grasses and forage plants, dried and sewed on sheets at full length, were hung on the wall, represented the botanical department. The entire exhibit is under the supervision of Guy L. Stewart.

The horticultural department exhibited at the State fair several new varieties of peaches, native plums, a collection of tomatoes, sweet corn, together with several plates of hot house grapes. Prof. A. A. Crozier acted as judge on grains, Prof. H. W. Mumford on mutton sheep, Prof. L. R. Taft on fruit, and Prof. C. D. Smith on Jersey cows.

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.

O. C Clute is working for the Hanan & DeMuth Shoe Co. of St. Louis.

³67. -

W. W. Tracy has returned to Detroit after a five weeks' trip to California.

'70,

A. H. Phinney is in the banking business at Tawas City, Mich.

'7t.

E. B. Fairfield has been spending his summer vacation at Bay View and Petoskey.

73.

G. C. Nevins has commenced his sixth year as principal of schools in Otsego, Allegan Co., Mich.

'77.

Z. Beverly is serving his second term as register of deeds in Cass county.

Lyman A. Lilley is register of deeds of Allegan.

'78.

E. O. Ladd is register of deeds of Grand Traverse Co, Mich.

79.

Ray Sessions is working for the Mancelona Handle

Harry Wilcox is treasurer of Baraga Co., Mich.

·82.

- W. T. Langley is principal of the West Superior schools, Wisconsin.
- E. A. Murphy has gone into partnership with the Locke boys, Charlie and Aif, for the practice of law. The firm has its main office at Ionia, with a branch office at Belding, Mich.
- T.F. Millspaugh is concerned in the suit against the American Pepsin Cracker Co. of Detroit.

'83.

Henry A. Danville is principal of the Essexville Mich. schools.

'84. ·

John I. Breck has been appointed one of the inspectors of the State Food and Dairy Commission.

Llewellyn Bonham is manager of the New York branch of the American Refrigerator Co.

'85.

R. M. Bates is a successful farmer near Hastings, Mich. He was one of the prime movers in a farmers' institute held there recently.

'87.

Geo. Hume visited old friends at M. A. C. recently. He is going to take the "twenty weeks" course at Ypsilanti, and then spend the rest of the year at this college.

H. W. McArdle, who has been studying at the "U. of M." during his vacation from the South Dakota Agricultural College, has returned to South Dakota. He has received an increase of salary.

Will Curtis is editor of a daily paper in Kewanee, The Evening Star. He writes that he is soon to be married to the best girl in the state of Illinois. THE SPECULUM extends its heartiest congratulations, for it knows what good girls the state of Illinois can produce.

I. B. Bates is general agent in New York, Pennsylvania and Ohio, for the Detroit Graphite Company.

Obadian Wheeler took the dairy course here last winter and is now manager of the Coopersville creamery, of which Colon C. Lilley, 84 is one of the heaviest stockholders.

With '87.

G. L. Smith was recently married at Bozeman, Mont.

'88.

A B. Cordley has been appointed professor of entomology in the Oregon Agricultural College:

W. F. Staley made a short call on old friends at M. A. C.

Dale Smith is traveling for a Portland, Mich., Soap Company.

'89

H. E. Weed and wife visited M. A. C. recently. He is professor of entomology in the Mississippi Agricultural College.

¹89.

- L. W. Spaulding is teaching at Hillside, Wis. He teaches mathematics and manual training.
- L. E. Rice is in the hotel business with his father in Grand Rapids. They have charge of Sweet's Hotel, which has been thoroughly refitted and made a first-class \$2.00 per day house.

Alex. Moore is practicing law in Port Huron and reports a fair degree of prosperity. One of his partners is Eugene F. Law, '83. Alex was married last spring and has a pleasant home in Port Huron.

J. H. Freeman stood second in a class of twenty-five in the examination for promotion from third to second assistant in the U.S. patent office.

'90

John W. Toan enters the U. of M. this fall to study for an M. D.

- E. G. Cooney has resigned his position as business manager of the Practical Farmer and Fruit Grower in Grand Rapids to teach school.
 - J. H. F. Muliett rejoices in a son, Victor.

WITH '99.

P. S. Robinson was married recently.

Paul Chapman is farming near Lapeer, Mich. He is married and has settled down to business on a place of his own.

Clayton Bower has a job printing office at Mt.

FLA. Hopkins has purchased the St. Clair Republican:

'gi.

G.T. Waterman, professor of veterinary at Storr's Agricultural College, Conn., was married on the 4th inst., to Miss Marilla H. Muttay of Salem, Mich.

Miss Jessie Fuller is teaching in the Lansing high school.

- H. W. Mumford has been appointed to fill the vacancy made by the resignation of his brother.
- A.C. Sly is deputy treasurer of Roscommon county, Mich., with several side issues.

Berto Holden has charge of the Hastings high school with 157 pupils enrolled.

WITH GE.

Jesse Patterson is engaged in the jewelry business with his father. They have one of the finest jewelry stores in eastern Michigan.

"Hank" Avery, erstwaile champion high kicker of M. A. C., is in the harness business in Detroit.

Willis Chapman finished the medical course at the "Us of M." in 1804, and now has established a good practice at Cheboygan, Michigan.

92.

L. C. Brooks is principal of the Stronach, Michigan, schools.

WITH '92.

J. A. White has charge of the Commercial Department of the Burlington Iowa high school.

Dana T. Jones is a reporter for the Grand Rapids Democrat. He spent the summer reporting for the Petoskey Daily Resorter.

Rob. Kedzie has been in the hospital at Grand Rapids for a month past. He is out now and is convalescing.

'93.

- H. F. Palmer is practicing veterinary at his old home Napoleon, Michigan, with good success.
- A. T. Stevens, who was recently appointed Professor of Agriculture in the South Carolina Agricultural College, was married on the 12th just., to an Eaton Rapids girl.

Roy Bristoi is with E. Bement & Sons in Lansing.

- W. L. Cummings is surveying in Mississippi.
- E B. Hale is county school commissioner in Ionia county, Michigan.
 - L. A. Wilson is in a bank at Kalamazoo.

Miss Kate Cook, who has been spending the summer in Michigan, is now on her way home to California.

- Ed. G. Peters is a partner in the large job printing firm of Peters, Seamans & Co., in Saginaw, E. S. "Ed" was at Mackinaw with the Naval Reserve.
- D. S. Cole spent a few days at the college recently, assisting in specifications for remodeling the heating system of the library and museum. He has resigned as assistant in the Lansing weather office, to engage in mechanical pursuits.

⁷94.

- D. D. McArthur was married to Miss B. M. Philp of Bad Axe, August 21. The happy pair took the first train, after the marriage ceremony, for South Dakota. There Mac. will resume his occupation of molding the intellects of the young Indians of the Yankton reservation.
- C. J. Foreman took the civil service examination for Experiment Station work, which was beld at Jackson, August 30. He and Howard Smith '95 were the only applicants.

John Rittenger is teaching school. He pitched against Royal Fisher at a base half game in Three Rivers recently.

- J. W. Perrigo was at the college recently. During his vacation in August, he made a tour through New York on his wheel.
 - R. S. Welsh and wife are both teaching at the "Soo."

WITH '94.

Harry Pinney is the cashier of the Exchange Bank of Cass City, Michigan.

- J. W. Patrick is with his father in the lime quarry business at Gross lie.
- A J. Beese was the crack shot in the gun practice of the Naval Reserve at Mackinaw.

'95.

Royal Fisher, after having a good time, has settled down to business and is taking the "twenty weeks" course at Ypsilanti. He has had wonderful success at pitching the "gay and festive" base ball this summer.

- C. H. Alvord was clerk in the racing department of the State fair at Grand Rapids, Michigan.
 - M. W. Fulton has received the appointment to the office formerly held by A. T. Stevens, who resigned, to take a step higher.
 - H. W. Lawson is clerk in the State Food and Dairy Commission.

Howard Smith took the civil service examination for Experiment Station work, which was held at Jackson, Michigan, August 30.

Thorne Smith was appointed instructor in chemistry to fill the position made vacant by the promotion of H. E. Harrison, to a position in the Experiment Station.—The Union Lit.

Gerritt Masselink has entered upon his duties as principal of the Cass City high school. He was offered a \$900 position as instructor of botany in the Oregon Agricultural College, but he preferred to stay where he is.

J E Niswander is at home in Hoosierdom, resting after his four years struggle.

Clay Tallman is principal of the Smyrna, Michigan, schools.

- F. P. Normington attended the teachers' institute held at Ionia last month.
- C. H. Robison is teaching school at Raisinville, Michigan.
 - W. C. Bagley is teaching in the Upper Peninsula,
- L. H. Van Wormer is teaching near Hudsonville, Ottawa county, Michigan.
- J. H. Kimball succeeded D. S. Cole as assistant in the U.S. weather service station at Lansing.

WITH '95.

Kwaliota Nijirii

- F. B. Phillips is working in his father's store in Detroit.
- J. C. Adams is keeping his father's store in Case-
- W. F. Bernard has left the employ of W. J. Gould & Co., and will study for an "M. D." at the Detroit Medical College.

'96,

- C. E. Rork won the diamond medal in the two mile bicycle race at the State fair at Grand Rapids.
- G. N. Eastman (Ikey) is buying sheep at Imlay City, Michigan.

With '96.

Homer Frost spent the summer at Caseville.

John Nellist visited M. A. C. recently. He is working for a bicycle manufactory at Grand Rapids.

W. B. Gilbert was here last week for a few days.

'97•

Clay Newman is home on the farm at Portland, Michigan.

E. A. Robinson took advantage of the excursions to Petoskey and went home for a few days.

With '97. 🐃 🦥 🎋

- A. B. Stonex is working in the repair shops of the Southern Ohio & Indiana R. R. at Toledo, Ohio.
- C. A. Kelley has recently finished a course in engraving at Winona, Minn. His specialty is copper plate engraving.

Jerry Stock is working for a florist in South Orange, New Jersey.

L. C. Smitheis working in a bank at Gaylord, and expects to return to M. A. C. as soon as the state of his exchequer will permit.

Ben. Halstead enters the University of Indiana this fall in the Law Department.

C. P. Case had his hand badly lacerated by a buzz saw in the shops recently.

WITH '98.

F. H. Wilcox was here last week, visiting friends at the college.

A THLE TICS.

At all the other colleges in the M. I. A. A. there is a gymnasium. According to our catalogue we have one too. Athletes at other colleges can train in the winter and come out in the spring with strong muscles. We have only six weeks in the spring to turn out athletes with "catalogue gym" exercise.

Congenial exercise develops strength and health.

Does farm labor do it? Let the reader answer.

Stringent efforts are being made to organize our base ball team this fall, and thus far the prospects are fair. Of the '95 players four will be with us next year. McKinnon who is doing special work here will be the strongest man on the team. His good work during the past season, and genial good nature and wit has won him the captaincy for this term. McKinnon has played first base in a number of games with the Lansing league, where he did uniformly good work. Reed will be the pitcher. He hopes to fill the position left vacant by Fischer, and will do strong practice work. His work speaks for itself. Gorenflo, who has done such steady work in center field for the past two years, will be one of strongest players in the M. I. A. A. and a credit to M. A. C.

An important change has been made in athletics, and one which may further the interest in sports. At a meeting of the Students' Organization held August 30, it was decided to have a standing athletic committee, composed of the managers and captains of the base ball, foot ball and athletic teams, together with the president of the Students' Organization as chairman.

Krental, who has caught for the past season will represent us ably behind the bat. His good work for the past season is testimony of his ability as a ball player.

The possibilities, who have sprung up bid fairly well. Among them may be mentioned: Warren, who is the pitcher of his class team; Kling, s s of his class team; Gunnison, r f of his class team; McLouth, 2d b of his class team; Chase, a new man; Simmons, 1st b of his class team; and we understand there are others, some of whom are in the freshmen class.

The officers for the ensuing year are: Prof. H. K. Vedder, manager in faculty; E. E. Galiup, Assistant manager. Mr. Gallup with his push and energy will be a strong worker for the team, and we are pleased to announce his selection. Mr. Kanter has been elected scorer.

Two class games of base ball have been played: Juniors vs. Sophomores. Juniors defeated both times. Scores h st game 17-5, second game 13-6.

Our able and efficient foot ball captain, Mr. Vanderhoed is battling against difficulties to form a team. A number of last year's players are with us and very good material from which to form a good team. They are practicing regularly and hope to be in good shape soon. The officers are Prof. P. B. Woodworth, manager in faculty; F. W. Herbert, assistant manager. We hope to witness some interesting games this fall and a revival of that report, which will place our college on a footing with Albico, Hillsdale, Olivet and where in this respect.

The faculty athletic committee have kindly consented to meet the student athletic committee in order to further athletic sports. At this writing it is impossible to state what will be the result of the meeting. From it much or little can result, but your editor kopes to make a very good report in the next issue. Meanwhile let its "pu it the good things along." The students athletic committee is composed as fullows: O. H. Reed, chairman; E. E. Gallup, F. W. Herbert, A. C. McKinnon, W. K. Vanderhoef, I. L. Simmons. On the faculty athletic committee: Prof. H. K. Vedder, chairman; Prof. W. L. Weil and Prof. E. A. Grange.

Remember local field day September 21. All entries to be in by the 17th, to F. W. Herbert, local field day manager.

In a college like ours where athletics are discouraged, except a few scrub ball games to vary the monotony, and every point for athletics is won only by the greatest amount of work, it should be our duty to do every possible thing to further the interest. From the editor's point of view, one of the most detrimental rulings that was ever passed by a college faculty is the one which prevents our college base ball and foot ball teams from playing off of college grounds. Why it was passed at this college is a mystery to many. It is the sense of every student and especially of the teams to play college teams, but when games cannot be arranged with them—as in the summer term—it is necessary to play other feams.

We can only build up teams by playing outside teams. It would be the pride of every student to speak of the crack teams and players at his college. Beyond a question it would produce a desire to stay here and to increase the attendance. Older students often speak of the teams of '89 and '92, when we played the U. of M. and other crack teams. To day we can point to defeat and nothing to encourage. Such scores in base ball as 28-6, 28-8 are heard every day, and in foot ball still worse.

At a late date the editor is in receipt of a letter from a prominent member of the faculty, in which he states the many kinds of weeds growing on our race track and the seeds which have been scattered for a larger crop next year. The writer also states that the weeds have been making more of a "conspicuous success" than the athletes, but he forgets that athletes "cannot make a record at field day and one in Botany too," since the worthy doctor has made the preceding statement, our athletes have adopted the only alternative and are endeavoring to get the record which leads to B. S. We nevertheless think that the doctor was sincere in his statments and as the boys secured the race track on condition that it should be kept up, this department does not hesitate to criticise the action of the students in regard to this matter, we want until the track is blooming with "obnoxous vegetations" then we criticise the Horticultural department for not looking after it. A little work at the proper time will keep it in shape. We have a local field day manager and a captain of athletics who should look after this matter.

A joint committee meeting of the faculty and students was held Sept. 10. Little was accomplished except that the managers of the different teams are to submit in writing to the faculty those matters which they think would be the best for athletics in their respective departments. These recommendations are in now and no doubt will be considered soon.

It is evident that the students or faculty have to take a determined stand in regard to athletics. It is very hard to form a base ball team here let alone getting in shape to put up a respectable game. We must either have a ball team which can play ball or note at all. Which shall it be? We have opportunites for developing a team, the sound of whose fame shallonly be lost in the waters of the lakes or stopped by the preponderance of the college teams in our border states.

COLLEGES AND EXCHANGES.

The following are extracts from an article in The Evening Star of Kewance, Ill., entitled "The Michigan Agricultural College," by Will Curtiss, '89:

"The Michigan Agricultural College stands at the bead of all institutions of the kind in America. * * This college is marked by two distinctive features. It has the largest per cent of self-supporting students and the greatest per cent, of successful men among its graduates of any college in the States. * The secret of such marked success is this. The college

work is practical. * * College runs during the nine months from early spring to late fall, with a week's vacation each in May and August. The long vacation is in the winter. Many of the students, and especially those who are paying their own way teach winter terms of school. * * Every man stands on his merits. His character and intellectual ability is the sole test of his standing among his fellow students. * * It is purely a scientific course and corresponds favorably with the scientific course of any large university. The object of the school is to lay the foundation of a broad and thoroughly practical education. Should the student want to be a specialist in any line of scientific research he has the opportunity in post graduate work; if it is a profession then he can go to some other institution to complete the education so well begun. The moral atmosphere around this institution is good. In athletics this college takes the lead of all Michigan colleges except Ann Arbor. A half doz-n good literary societies give the student much practical literary work and drill in public speaking and debate."

In conclusion he says: "I only know of one draw-back to this most excellent school. It has a wise president, a faculty composed of eminent men, all the necessary equipments for work, everything a college could desire except—ladies. It is not co-educational, and the students lose the refining, uplifting and ennobling influence of the gentler sex. This is a defect which will doubtless be remedied within a few years at most, at least such is the desire of nearly every alumnus."

So say we all, and we only hope that the day is not far distant when co-education will be a feature of our college.

We clip the following from an article in the Cadet entitled "Theory vs. Practice in Technical Colleges:"

"Do not expect when you graduate to know all there is to know, for your education will have but begun, and you will be very ignorant of many practical details, but if you have mastered the problems that have been given you, and have learned to reason, and to have confidence in your reasoning and are willing to be taught in practical matters by the experience of others, even though they may not, like you, have had a college training, you will be able to meet successfully the practical problems that await you, and will have great advantage over those who have not had such opportunities."

The Earlhamite contains a very excellent article entitled "What is Genius?" The writer very forcibly brings out the fact that Genius is not transmitted. Genius is not hereditary. It is the result of our own labor and study. "Man's genius is his will."

The following is a clipping from the Michigan Farmer:

"In several instances the owner and personal manager of such a farm was found to be a graduate of our Agricultural College. There are many 'educated' farmers in our broad land, and they are the bone and sinews of our 'profession.' Agriculture to day would not occupy the high and prominent position it does (despite the present discouraging condition of affairs), were it not for Agricultural Colleges and Experiment Stations.

"The best help we ever had on the farm was from men who are college students. They understood the principles underlying certain phases of work in course of prosecution, and made every move count. There were no false motions, or lost time, in endeavoring to find out how to do a thing.

"With the modern appliances at hand for quickly and properly accomplishing the desired results in any hitherto laborious task, the individual possessing simply brute force is decidedly 'not in it,' We have found, from experience, that cheap, uneducated help is more of a detriment than anything else, in economically prosecuting almost any kind of work on the farm.

"Were we requested to select a foreman for a large or small farm, to be managed on a practical, profitable and a scientific basis, if you please, we should apply direct to the President of our State Agricultural College. He might not be able to find the man we wanted, by return mail, but we should try the plan at any rate. From occasional talks with the students there, we know that some of the future successful farmers of our country will emanate from that State institution, that surely ought to be the pride of every progressive farmer in Michigan."

HUMOROUS HAPPENINGS.

Cracks on the Campus.

He was a youth of great ability.

Of muscles strong of great agility.

Ambitous for an education,

A college course, a situation,

But having little information

He sent for catalogues far and near,

And read of our "gym" in the souvenir.

He came and fought the H2O.

Instead of a "gym" they gave him a hoe,

You see he was working for the State,

For the catalogue is only a bait.

An athlete student he would be,

And win honors great for M. A. C.

They gave him a flunk for a faurel, He's gone but left us this moral,

MORAL.

"Gymnies" in Ann Arbor now,
Is a sentence often told,
For instead of a "gym," a great big plow,
And he made up his mind he was sold.

Questions pertaining to the 'Darwin Theory," "Ingersoll's Lectures," and "Veterinary Science," will be freely discussed by applying to A. Cole.—Buzzard's Roost.

Who hang up the sign?

Moral from Cole-Do not sleep through Dr. Ked-zie's class.

History class:

Age?"

Student —"They never sold any furniture."

"The furniture business is what we make it."—

Wanted, "A game of anything outside of the cam-

First week.

Said '99 to '99:

This labor system is really fine,
I don't see why the soph's, whine,
For it surely keeps them right in line
With labor questions every time.

Third week.

Did you bear president say, That we must work on Labor Day.

Class in history :

Prof. to '98-"How long after his first invasion did

'a -"Over one handred years."

'98 to Sentor-"What society meets in that room that has Y.M.C.A. on the curtain?"

Senior - 'Oh! The Natural History Society meets there.'

Corporal to '99-"Straighten up." '99-"I can't. I just broke my suspenders."

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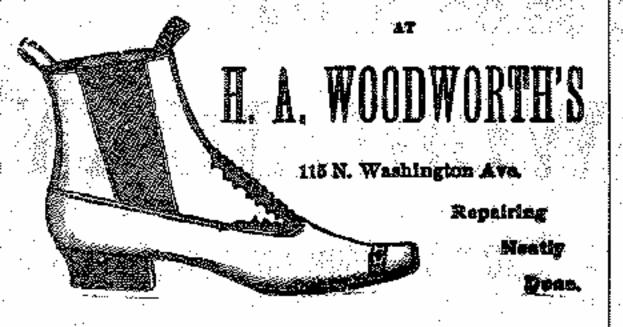
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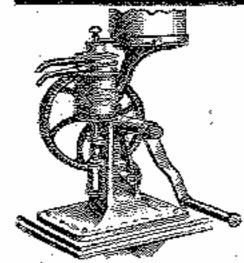
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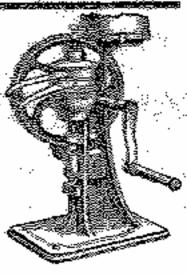
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