

SEPTEMBER 10, 1890.

The Spectator

Mich Agricultural College.

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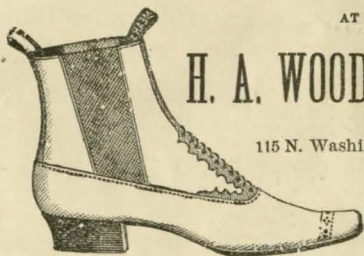
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THE SPECULUM.

VOLUME X.—No. 2. AGRICULTURAL COLLEGE, MICH., SEPT. 10, 1890. WHOLE No. 48.

The Farmers' Issue.

GEO. A. HAWLEY, UNION LITERARY SOCIETY.

Every four years, when the voters of this country are being agitated over the political issues, when each party is parading its platform and working to elect its chief executive and members to control the affairs of the nation, it is curious to note the differences in opinion which seem to exist between men of the same class and occupation. But the division of voters which most interests us, and which is perhaps the most absurd, is that among the agricultural classes of our country, composed as they are of men striving for the same goal, interested in the same industry, wishing the welfare of the same people, but supporting political parties directly opposed to each other.

The issue of free trade and protection, which has so long been the division line between the two parties of this country, we will all agree, is an important one, but that it is not the most important issue to the farmers of this country is what we wish to prove.

It has been merely a matter of speculation with statesmen who have entered into its discussion, whether the poorer classes would be benefited by either absolute free trade or high protection. In fact, it will not be disputed that the Republicans are not absolute high protectionists, nor that the Democrats are not absolute free traders, and the principal issue that can exist between the two is that between the unmodified terms.

One of the parties must be right, or both wrong, and the latter is undoubtedly the case. Each pledges friendship to the farmer, but the fact that the general difference between the two parties, as interpreted by the majority of the voters, is not great enough

to create a defined issue, only proves that the pledges can not be sustained as long as the exponents of those parties are opposed to each other.

The fact that each of these parties is upheld by the farming classes, would seem to indicate that those classes are definitely divided in thought as well as in action; but the real facts do not seem to show it. Who is there that has ever attended the polls and not heard the arguments of the Democrats used by the Republicans, and vice versa? In fact, many of their principal arguments are interchangeable. Bring them down to their proper issue, and the farmers will not be divided; but with such an issue as free trade and protection they are mystified and puzzled. It is no wonder that a problem which cannot be solved by our best statesmen, puzzles and misleads a people who spend but little time in political discussion.

The farmers, while arguing the good and evil of free trade and protection, lose sight of a very essential thing, namely, the qualities of the man who is to represent them in congress. It matters not what they think about the principles of government, if they send a millionaire to represent them in congress it is self-evident that the millionaire faction will not suffer so that the farmer may live. It is well understood that the sympathies of men are with others of the same class and occupation, and we have no right to think that it will be otherwise in congress.

It is from the very unnatural way of supporting the principle and losing sight of the man that the farmers have allowed the senate to become a house of millionaires, and that, in the present congress, it is impossible to pass a law to benefit the farmer at the expense of the money king.

The question why such an inconsistent condition of politics exists, can undoubtedly be answered by the fact of the persistency with which men cling to a party for no other reason than that it was the party of their ancestors, and they accept it as a sort of an heirloom, and are willing to uphold its principles even against their own interests.

The voters do themselves and their country the greatest harm by not understanding why they take the position that they do. They misuse their most sacred right when they vote without thought.

There is another slight issue which perhaps makes some difference in their party vote, and that is the high license and free whisky issue. But this is not of vital importance in the voter's discussion as to which party ticket he shall vote, and should not influence him in the least. Let him be sure that he is sending an honest and conscientious man to the law-making chambers and he can feel certain that all will be done that can be done to suppress that worst of curses, the liquor traffic.

As long as the farmer remains divided he loses his time and his vote. Yea, it is greater than a loss of a vote; he aids political corruption by offering an opportunity for unfit and dishonest men to obtain positions of trust and honor. The method of such corruption is known to all. The immense quantities of money spent at every election is only a proof of the corruption which must exist. The farmer cannot act neutrally. If he acts at all he must act directly for some good or he will produce evil.

In future campaigns where is the real issue to be? He cannot support both of the two parties. He cannot be a strict Democrat nor a strict Republican. For nearly half a century have both parties been upheld, yet he finds himself and his industry little in advance of fifty years ago.

It is his privilege and duty to put the old principles of free trade and protection in the background, and in their stead place ques-

tions of more vital importance—the question of incorruptible and farm-loving representatives above all others.

The manufacturing element has not been asleep to the pliable state of politics during the last decade, and the many millionaires that have sprung into existence have been from this class.

It is high time that the strictly farming element should wend its way toward the congressional halls. In fact, the farmer has already begun his proper political career in the "Farmers' Alliance" and the "Patrons of Industry," and it is to these organizations that we must look for the future prosperity of the agricultural classes. Though not formed on strictly political bases, they have gradually gone in the direction where they are most needed, and have been working the fall campaign in nearly every state in the Union. Their duty is a great one, and their efforts must be long continued. They will have to wage war on scores of trusts and monopolies that are grinding the poorer classes down. But let the farmers be organized for a high and definite purpose, keeping the immediate welfare of the agricultural classes in view, and there will be no difficulty which they cannot surmount. Organized, they are the strongest class in the United States; unorganized, the weakest.

As long as they work for one purpose, and do not lose sight of consistency, they will lead the nation, and the seeming difference in opinion among a people who should think as one, will no longer exist.

And may we hope from the work of this organization the grandest of industries may prosper, and the natural home of man abound in abundance and comfort.

The Indians of Northern Michigan.

FRANK BAUERLE, DELTA TAU DELTA FRATERNITY.

Comparatively little has been written about the tribes of Indians that inhabit Northern Michigan. A small book has

been published by one of these Indians. This man, whose Indian name, Mack-e-te-be-nessy, translated into English is Blackbird, is the son of a war-chief of the Ottawa tribe. The history of his life and work is so closely connected with the present condition of his people, that a short sketch may be introduced here.

When about twenty years of age his highest ambition was to obtain an education, so that he could help to enlighten his people.

Rev. Allen Coe, a traveling missionary of that district, became acquainted with Blackbird at this time, and learning of his ambition, sent him to Ohio, where he was in school for two years. He was afterward for two years a student at the State Normal School at the expense of the government, but the allowance made him was so small that he was compelled to leave.

He returned to Little Traverse to teach and work among his people. He has been untiring in his efforts to better their condition. He has been their leader and counselor. It was through his efforts that they secured the right to vote. He also induced the government to appropriate money to help carry on the work of education among the Indians. About 1860, he was appointed United States interpreter, and in 1872 he became postmaster of Little Traverse.

The portion of Michigan inhabited by the Indians of whom Blackbird is a descendant is that embraced by the counties of Cheboygan, Emmet, Charlevoix and Antrim.

At the time the French missionaries were beginning to come to this region, these Indians lived a simple life. In the summer they tilled the soil. In the winter they moved to the Muskegon River to fish and hunt. Their principal city was situated where Harbor Springs is to-day, and here were held all their big councils. They had no laws, but were governed by the views of the majority except in times of war. The orders of the war chief were then supreme.

Anyone who has seen the moral condition

of these Indians of to-day would hardly believe that their forefathers were a fine and virtuous class of people. They were taught from earliest childhood of the Great Spirit, and had commandments resembling our own, which they were compelled to obey. Cases of murder were very rare. Tradition speaks of only one instance, in which an Ottawa killed a Chippewa. This almost resulted in a bloody war, which was only prevented by the Ottawas ceding the Grand Traverse region to the Chippewas. This is the reason why Chippewas are found in this region at the present day. These early Indians avoided the use of intoxicating drinks and profane language, and continued virtuous until the white man began to teach them his vices.

Just before the trouble arose between the French and English governments in America, the Indians of these tribes were very numerous. They were always friendly to the interests of the French king, whom they called their "Great Father." During the French and Indian War, the warriors of these tribes were once returning from Montreal. As they were leaving they were presented with a small tin box by the British authorities, who told them that this box contained something that would work great good among them. It was given to them with the strict injunction that they were not to open it until they arrived at their home. These ignorant beings believed all that was told them, and immediately upon their arrival at home, proceeded to open the box. They found numerous smaller boxes, one within the other, and finally came to one about an inch long, which, when opened, was found to contain some mouldy particles. They could not see what great good this was to do them, but in a few days it was made known to them by the outbreak of small-pox. The ravages of the disease must have been terrible. The great Indian doctors were themselves taken down with it. Whole families and even the entire population

of cities died. Long Village, their chief city, extending from Mackinac Island to Seven-mile Point near Harbor Springs, was one of these cities.

Another great misfortune that happened to these tribes occurred in 1800. The Shawnee Prophet, brother of the chief Tecumseh, sent his emissaries among these tribes to tell them that the Great Spirit was angry with them because they were living after the style of the white man. And further that the Great Spirit had ordered them to go west, and live in their old primitive style, and if they did not go he would shake the earth as evidence of his anger. A great many of the Indians became frightened at the prophecy and moved to the West. It happened that Michigan did have an earthquake at about this time, which so frightened the remainder that most of them followed their brethren. The poor deluded creatures, not being acclimatized, died in great numbers. These are the two misfortunes which greatly reduced their numbers.

Blackbird says: "My own race, once a very powerful, numerous and war-like tribe of Indians who boldly trod upon this soil, is near the end of its existence. In a few more generations they will be so intermingled with the Caucasian race as hardly to be distinguished as descendants of the Indian nations, and their language will be lost."

The present condition of these Indians as regards education, is a little more encouraging than it was ten years ago. The Indian children attend the public schools, and in Harbor Springs there is a convent used expressly in the education of these Indians, where they have an attendance of about one hundred. It is a charitable institution, but as the expenses constantly increased with the attendance, they were obliged to obtain aid from the government. The children as a rule are bright and intelligent.

The Indians are a very religious class of people. Most of them belong to the Catholic church. The priest in this church, in

order to be understood by all of his audience, preaches first in German, then in English, and finally in the Indian language. In Petoskey the Indians have a church of their own, presided over by an Indian minister.

The moral condition of the Indians now found in Northern Michigan is, nevertheless, very low. They use intoxicating drinks to such an extent that it is killing many of them. They learn all the vices of the white man, and carry them to greater excess than he does. The men work on the farms in the summer and in the lumber camps in the winter. The squaws help to support their families by making curiosities of birch bark and sweet grass, which they sell to the resorters visiting this region during the summer season.

The history of the Indian tribes in America is one of great interest. The problem of our treatment of the fast-diminishing remnant of the race is one not easy of solution. Much injustice has been done the red man by his white brother. Our government should recognize this, and use what means are possible to help the Indians to become useful citizens of the land.

The Force of Education.

BURTON A. HILLS, OLYMPIC SOCIETY.

Education, in its growth, develops a force that is ever pressing outward and onward. It is continually enlarging its sphere, until it pervades all the regions of thought, demolishes the obstacles to enlightenment, and carries its inquiries into every field of enterprise and speculation. Education is radical rather than conservative. It is not content with repose, but is ever sweeping onward like a mighty river, broadening and deepening as it goes, and carrying everything before it with an irresistible but steady force. The fondest fancies, the dearest creeds, and the profoundest theories of mankind, are not free from its undermining influence. Ignorance, prejudice, superstition

and barbarism fall before it as grain before the reaper. Education makes Christianity possible, lifts nations from savagery to the higher planes of civilization, and changes governments from monarchies to democracies.

The most noticeable effect of educational force is that which it exerts on the religion of mankind. The seeds of Christianity sown by our Savior found congenial soil only, where, in that age of the world, education and intelligence were developed to the highest degree. Indeed, the time of our Savior's coming is considered an additional proof of his divinity, for the world was not prepared to receive the doctrine of Jesus until education had opened the highway. Many people among whom he labored, suffered, and died, were still too ignorant to understand the truths of his teachings. The great dark continent of Africa, where he shed so much of his precious light, has, by its lapse into barbarism, become darker than ever, and can be lifted from this pit of desolation only by the united forces of education and religion. Christianity first established itself in the then western world, where education and learning had begun to exert their civilizing influence, and there took up its march westward, with education in the lead. To-day it has reached its utmost western limit, and is returning once more to its birthplace to finish the work it but partly accomplished before.

In the work of civilization, the pedagogue must precede the prelate. He must remove the forests of superstition to admit the light of religion, else it will make no impression on the dark wilds of barbarism. The mind of uncivilized man must be awakened from its condition of lethargy and trained to think before it is prepared to receive the lofty conceptions of Christianity, for, if this is not done, instead of its lifting him to a higher level, religion will be dragged down.

In the governments of the world education has displayed its wonderful force and

power. Enlightened man no longer believes that he was made for government, but that government is made for him. In the higher forms of government to-day, the people are not regarded as subjects or servants of sovereigns, but on the contrary call their rulers public servants. In the past, people obeyed tyrants without thought or design. It is different to-day. Education has destroyed the belief in the divine right of kings, and in the distinction of blood. History informs us that in time gone by despots made and executed laws to suit their own selfish ends, and the people obeyed without murmur or question. Kings went to war to satisfy personal ambition, or to settle some petty personal grudge. We accept nothing now without question. We doubt, then investigate, and finally demolish or support. When men become less credulous, and begin to think for themselves, they are on the eve of discovery and invention, and have reached the royal road to improvement. In the morning of the world men were taught that they had no individual rights, but that they were the property of the State. We are taught differently to-day. Education has removed this tyrannical absurdity, and we believe that a State has no rights not granted to it by the people; and that a government can exist only so long as it has the consent of the governed.

Some seem inclined to think that the world does not produce to-day men as great as those of ancient Greece and Rome. This is a mistake. In that day comparatively few men were educated. Learning was not so widely diffused as it is at present. The number of great men of earlier times was so small that their names stand out more conspicuously on the pages of history. Men of genius and learning were then confined to but a small portion of the world, and up to that time had no rivals. It is doubtless true that we know more about the great men of the past than we do of those of the present, and this serves to make the contrast seem

greater. It is also true that the genius and energy of our great men is directed to different pursuits, and runs in different channels of activity, than it did in the days of Greece and Rome. If man's greatness is measured by the good he has done for humanity, then surely Watt is a greater man than Alexander; Morse is a greater man than Socrates; Robert Fulton is a greater man than Cæsar; and Washington is a greater man than Hannibal.

The ancient civilization boasts of great wonders, such as the Pyramids of Egypt, the Colossus of Rhodes, the Hanging Gardens of Babylon, and the Temple of Diana, but they are not truly great in the sense of being useful, for they were of no practical utility. They stand simply as relics of the tyranny, degradation and slavery that existed in earlier times.

How does the Colossus compare with the great Brooklyn bridge that spans the East River, bearing upon its strong cables throngs of pedestrians and vehicles, gliding to and fro in ceaseless activity, and beneath which is lying at anchor the commerce of nations? How do the pyramids, in all their majesty, compare with ocean cables and telegraph lines, by which time and space are said to be annihilated, and nations to shake hands across the briny deep?

The force of education has wrought these mighty changes. It has so lighted up the mind of man that he is enabled to utilize the great physical agents which his Creator has placed around him. It has produced an intellectual condition which has resulted in the use of lightning for the manufacture of material light, so that altogether we are the most enlightened generation that has ever inhabited this earth.

SCIENTIFIC.

Natural History Society.

At the meeting of the Natural History Society, July 18, Harris F. Mullett gave an interesting talk on some of the characteristics

of the rattlesnake. His talk was illustrated by crayon drawings and several specimens of preserved rattlesnakes from the college museum.

He said: "The peculiar noise so characteristic of these snakes is produced by the bone-like scales at the end of the tail. It is generally thought that the number of rattles will indicate the age of the snake. This is not always true, as a rattle is formed every time the snake sheds his skin, which may be two or three times a year.

The fang of the rattlesnake is interesting. When at rest the two hollow teeth, known as fangs, lie pointed backward, each being covered with a fold of soft skin of the interior of the upper jaw. The poison glands are almond-shaped and lie directly under the eyes. At the base of each fang is an opening connected with a tube which runs to the poison gland. These glands manufacture poison and store it up for future use. A curious arrangement of the bones of the head enables the "rattler" to throw out or forward his fangs. A small circular muscle around part of the poison duct keeps it closed and prevents the waste of venom.

When the snake is about to strike he assumes a spiral form with the head raised several inches from the center of the coil. The mouth is opened very wide and the fangs are erect. With great swiftiness he will strike once and be back on guard again. At the moment of striking the circular muscle which closes the poison duct relaxes, the muscle which shuts the jaw presses the poison gland, and the venom is driven through the duct and fang into the bitten part.

The venom is not a simple material, but is composed of two elements, each of an albuminous character, one having a local action and the other a powerful action upon the nerves. It is this latter material which is so deadly in its effects. The venom of the poisonous snakes of the East Indies has an excess of this material, and they are, for this reason, much more poisonous than the ven-

omous snakes of this country. The poison is readily absorbed and soon breaks down the blood vessels. Under the microscope a little of the mesentery which has been touched with venom soon loses its normal characteristics and the small vessels become covered with bunches with blood oozing from them.

Alcohol, contrary to the belief of many, is not a great remedy for snake bites. Mr. Mitchell says: "Venom from our poisonous snakes may be kept in alcohol twenty-eight years and not lose its power to kill."

Potash gives as the best remedy, and he is probably the best authority on the subject.

The rattlesnakes of this country vary greatly in size; some being eight and one-half feet in length. They are generally distributed throughout the United States, in the Southwest several species being found. East of the Mississippi River there are three species, only one being found in this State. West of the Mississippi twelve or thirteen species are found. Only two genera of snakes have rattles, the moccasin, which is common with us, and the true rattlesnake found farther south.

OBSERVATIONS.

Mr. Niswander reported the following: "On the muck-bed near the greenhouse our common grasshoppers are very dark. On the light sand near the road the same species is very much lighter. This would indicate that these insects have the power of mimicry."

Dr. Beal called attention to a patch of Bermuda grass, which is rapidly spreading over the lawn. This grass makes a good lawn.

Bert Cook: "When nature does not protect in one way she does in another. A few days ago I noticed a bird watching what appeared to be a mass of sticks on one of the trees on the lawn. On examination it proved to be a great number of larvæ with their heads sticking out in every direction. From appearances I thought the bird did

not know where to take hold. A few days later I noticed that these same larvæ were covered with a mass of white which upon investigation proved to be the cocoons of parasites upon the larvæ."

THE SPECULUM.

PUBLISHED MONTHLY DURING THE COLLEGE YEAR,
BY THE STUDENTS
OF THE MICHIGAN STATE AGRICULTURAL COLLEGE.

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AGRICULTURAL COLLEGE, SEPT. 10, 1890.

WE account for the absence of athletic news and the department of Colleges and Exchanges, by the fact that the respective fields of research in these lines are at present in a state of *innocuous disuetude*.

EVERY man in college ought to attend the Sunday School. It is no "goody-goody" organization, but a place for earnest men to get information, without which the world regards college graduates with suspicion as to their attainments.

WOULD it not be practicable, and if so, profitable, to have an occasional Wednesday afternoon lecture by some gentleman of wide reputation who is not connected with

the college? There are lawyers, judges, physicians and politicians of influence throughout the State who would undoubtedly be pleased to speak to us. These lectures could come on days when no other exercise is provided, and would not deprive us of the regular lectures by the faculty. We would thus get away from science for a time, and come into a little closer touch with the world. We are too apt to be aliens to much that transpires outside. We are apt to forget the world's workers and their work. Perhaps such lectures might serve to interest us, and make us broader in our conceptions and sympathies. May not the experiment be tried?

A FEW friends of the Patrons of Industry have taken offense at the article in the June number of THE SPECULUM, bearing the title of the organization. We beg them to remember that the literary articles appearing in this paper do not necessarily express the sentiments of the student body and much less those of the management of the college. Such articles are in no sense "semi-official."

Although this matter does not at all belong to our administration, we would state that the writer of the article is a gentleman of perfect honor, and if his statements are false we are certain that his sources of information misled him. If so, no injury can result to the Patrons. Nor should they judge the college unfriendly to their interests because of the appearance of the article in question, and if any of his statements are true, there is a way opened for a controversy which had better be foregone.

ALL friends of the college will no doubt be ready to offer congratulations upon the final passage of the Morrill bill, appropriating funds to agricultural colleges. The proviso that the money shall be expended only for instruction in agricultural and other industrial lines, will in no way discommode our institution, since the methods of work coincide with the requirements of the bill.

There is appropriated for the year ending June 30, 1890, \$15,000, and \$1,000 additional annually, until the sum is \$25,000, which amount will remain a perpetual yearly endowment. This means a sum equal to the interest, at seven per cent, on \$350,000. We feel certain that the Board of Agriculture will make no mistake in the use to which this money is to be put, and we are sure it marks the beginning of a new era of prosperity and usefulness for the college.

WE wish to call the attention of the students to our advertisements. What has been said before will bear repetition. THE SPECULUM is your paper and it is for your own interests to support it. Of course you subscribe for the paper, but you can and should do more than that. Most business men are not foolish enough to advertise when there are no returns for their money. They are glad to advertise when an increase of trade is sure to follow. THE SPECULUM aims to have reliable firms advertise in its columns. Why should you not buy of such firms when there is no loss to yourself and a great gain in the efficiency of your paper. We do not ask impossible things. Find out when you enter a store, whether the proprietor advertises in THE SPECULUM. If not find a merchant that does.

And we would ask the faculty to co-operate with the students in this matter in so far as they can do so.

WE believe the auditing committee should have more power. At present its work serves chiefly as a check upon mathematical errors of the steward, but the committee does not get information enough to ascertain the true condition of the club. Last year one or two of the clubs, when transferred to new stewards, were found to be quite heavily in debt. An auditing committee having power to examine the accounts more minutely might possibly have prevented any such misfortunes. Of course there must be a limit to the work required of the

committee, but it seems to us that they could examine the club books sufficiently to discover the standing of the club. We are aware that this would take more time for the members of the committee, but they are well paid, and while the new order of things would simply make the position of committee-man a more important, and therefore a more exacting, one, the duties would be no more onerous than those now performed by other officers without remuneration.

A FEW of the many letters received by the officers at the college are curiosities. Some people evidently expect to obtain an Agricultural Encyclopedia for nothing. Here is a sample received by a professor in New York, and sent here, probably because the information of the New York people is somewhat limited:

"Der Sir

"Please can you inform of the following best Breeds & Crossbreeds Stock & Poultry for most profit & economy easy keeping healthy hardy well built for Breeding farm purposes & labor horses for breeding labor yet some lively wishing to get a pair of mares for breeding and work on the farm cattle for milk butter Cheese breeding beef working oxen etc Sheep for best mutton wool early lambs large size easy keeping healthy hardy to best stand storms in summer in pastures away from home etc

And where is best to purchase each of above to the most advantage profit & economy and as near as you know the probable prices of each from young up for 1. a pair. ½ dozen and 1 dozen at a time and the probable charges of all mentioned above etc to send here or ship here."

Finally, after asking one hundred and three separate questions about poultry, potato diggers, grains, grasses, clover, fruits, books, etc., etc., the writer kindly says: "take plenty of time to answer all in full except potatoe digger to use soon grasses to sow with wheat & rye etc along as I may need answers etc."

Evidently the writer desires to practice "extensive" farming.

COLLEGE NEWS.

Three "co-eds" in the Freshman class.

L. Churchill, '89, visited the college recently.

Fifty-three mechanicals work in the iron shop.

P. B. Woodworth spent last vacation at home.

Prof. Davenport attended the Detroit exposition.

Mr. Campbell and wife have gone to California, to live.

Mr. Thurtell visited his parents during last vacation.

An unusually large number visited the library last month.

Mr. Curtis, foreman of the wood shop, is on hand at work.

Miss Carrie Burnett has been appointed assistant librarian.

Ask W. E. Palmer if he knows where Mr. Miller's tobacco is.

W. H. Van Devort visited his home in New York state recently.

The Mechanical Freshmen work in two divisions in the woodshop.

It has been suggested that the faculty be invited to attend chapel.

The Mechanical department will make a small exhibit at the State fair.

G. C. Davis is absent at Pine Bluff, Arkansas, working up the cotton ball worm.

Paul Theodore, teacher in the blacksmith shop, is giving excellent satisfaction.

Some exceptionally fine work has been done in the iron-shop during the past term.

Lieut. Simpson is having his annual difficulty with poison contracted from poison ivy.

About thirty, including many of the sub faculty, are taking German under Prof. Edwards.

College will be closed on Thursday, September 11, to allow those desiring to attend the fair.

The Horticultural department will make a display of vegetables and fruits at the State fair.

Mr. Gulley and family now occupy rooms in the Terrace. Mrs. Gulley teaches the juvenile school.

A number of former members of the class of '90 were back to see their old class mates graduate.

But fourteen books were added to the library last month, twelve by donation and two by purchase.

Lieut Simpson is making preparations to move in to the house recently occupied by Prof. Carpenter.

President Clute introduced the next governor (?) at the republican reception held at Lansing, August 29.

Prof. Taft attended the meeting of the Grand Valley Horticultural Society, held at Grand Rapids, August 21.

New steps have been recently built at the front entrance of Williams hall and at the rear of Wells hall.

The bees are beginning to "brace up," and are gathering large quantities of honey from the golden-rod.

Mrs. Beal, Secretary Reynolds and wife attended the funeral of Mrs. Prof. MacEwan at Kalamazoo, Sept 1.

A new line shaft will soon be placed in the east side of the iron shop and some light machinery on the east benches.

Rev. Jordon, of Lansing, preached an excellent sermon to a large audience in the chapel Sunday, August 31.

It is reported that Dr. Beal went to Lansing the morning that Barnum's show was there, *to get his horse shod*.

Mrs. Nellie Kedzie, Professor of Domestic Economy at Kansas Agricultural College, visited recently at Dr. Kedzie's.

Miss Anna Cavanah of Iowa City, Iowa, a student at Harper Hospital training school, was a guest of Mrs. Clute recently.

President Clute addressed the farmers at the following places: Grand Ledge, Aug. 6; Park Lake, Aug. 9; Lake Odessa, Aug. 22.

Dr. Kedzie returned from Washington where he attended the annual meeting of the Society of Experimental Chemists.

Prof. Edwards, wife and two children have taken possession of the cottage, for the professor of English literature, on Faculty Row.

J. H. Hale, of Glastonbury, Connecticut, member of the board of agriculture of that state, addressed the students in chapel recently.

Of the seventy-five members of the freshman class, forty eight are in the mechanical course, leaving but twenty-seven in the agricultural.

Prof. Taft's bulletin, No. 63, is becoming more and more popular. He recently received the fifth request for the cuts used in its illustration.

Ex-President Willits, assistant secretary of agriculture, has been chosen chairman of the committee on arrangements for the world's fair.

H. W. Mumford has returned from Lake Geneva, Wis., where he was sent by the Y. M. C. A. as a delegate to the "Lake Geneva Training School."

The new check system, now used in the iron shop tool room, works very satisfactorily and adds much to the neatness and dispatch of keeping the shop.

The increased number of students working in the iron shop will necessitate the removal of some of the light machinery and bench work to the gallery.

The Botanical department is making large collections of fungi with reference to future study. Dr. Beal says that this is the best time of year to collect them.

A large number of plants have been collected by the Botanical department this year, swelling the herbarium until it now contains about three thousand specimens.

Friday evening, August 9, Profs. Davenport and Holdsworth and their wives entertained the members of the senior class, with the addition of the co eds and a few of their friends.

The stewards for the boarding clubs are as follows: "A," W. O. Hedrick, "B," W. A. Fox, "C," G. C. Munroe, "D," K. L. Butterfield, "E," W. I. Herron, "F," C. T. Cook.

Prof. Cook presided as president of the Entomological Club at the Indianapolis meeting. The number present and the number of papers presented exceeded those of any previous meeting.

Dr. Manly Miles, formerly professor of agriculture at M. A. C., read a paper before the A. A. A. S. and the Society for the Promotion of Agricultural Science, at Indianapolis, August last.

Through the efforts of the Y. M. C. A. a Sunday-school has been organized with Prof. Cook as its superintendent. It meets every Sunday morning at half past eight o'clock, taking the place of the regular chapel service.

Prof. Taft attended the Detroit exposition on Horticulturists' day, where he was chosen to superintend the distribution of premiums on cut flowers, vegetables and fruits. He reports a much larger display than last year.

Miss Milner, librarian of the Normal School at Normal, Ill., spent a day at the college recently. She was very much pleased with our library and its management, and carried away many pleasant impressions of our institution.

A delegation of florists and vegetable growers visited the college recently, making a careful inspection of the Horticultural department. They were much pleased with all parts of the forcing house, especially the butted glass and cement walls.

The bees have been very unruly this summer, having refused, until within the last two weeks, to make anything like the usual amount of honey, and have lately practiced swarming at all hours of the day, from early morning till late in the afternoon.

Through the generosity of S. B. Mann of Glenwood, Florida, the Horticultural department has secured a fine collection of tropical fruit plants that was exhibited at the Detroit exposition. Some of its most interesting specimens are orange trees, bananas and pine-apples.

The Sophomore and Junior classes have elected officers as follows: Sophomore class; president, A. T. Stevens; vice president, B. A. Stowe; Secretary, Miss Katie Cook; Treasurer, V. L. Steward. Junior Class; President, L. W. Watkins; vice president, T. Baurle; Secretary, T. S. Major; Treasurer, A. N. Bateman.

H. R. Pattengill, editor of the *Moderator*, lectured

in the chapel Friday evening, September 5, to an enthusiastic audience, his subject being "The Great West," where he has been traveling recently. Immediately after the lecture a reception was given to the freshmen by the Y. M. C. A., in the Association rooms.

Mary Rohler, a lady over seventy years old, now living in the city, walked to the college last month—to visit the place where she was for a long time cook for the students who then took meals in the halls. She was present in this capacity at the opening of the college in 1857, when there were among the stumps, two halls, four dwellings, and a barn.

The Union Literary Society dedicated its new building Wednesday afternoon, Aug. 20, and in the evening held the annual banquet in the old hall. The following was the program: Music; President's address, H. J. Hall; Oration, Elmer J. Rowley; History, Warren Babcock, Jr.; Music; Poem, George E. Hancorne; Prophecy, C. P. Locke; Music.

The "Iota," the Delt's steam yacht, is back again to her former lodgings in the old carpenter shop, where she was brought from Detroit recently. After being thoroughly overhauled and repaired a new engine will be placed in her preparatory for a cruise from Saginaw to Charlevoix next August. A boat-house will be built at the latter place and the boat left to become the permanent property of the chapter.

Dr. Beal, Dr. Kedzie, Prof. Cook and Lieut. Durand attended the meeting of the Society for the Advancement of Science, held at Indianapolis, Aug. 20, where Dr. Kedzie was elected president of the section of Chemistry and Prof. Cook secretary of the section of Biology. Dr. Beal, Lieut. Durand and Prof. Cook presented papers before their respective sections. Dr. Beal reports the meeting a great success. The A. A. S. was well attended, especially the department of Botany.

The Horticultural department will co-operate this winter with the committee on apparatus and heating of the Society of American Florists, in practical tests of methods of building, heating and ventilating green-houses. Various chemical fertilizers will also be tested as to their effects on the growth of such vegetables as lettuce, radishes and beans. Similar experiments last year showed fine ground bone and bone-block to be valuable fertilizing materials for the growth of small seedlings, and in soil in which vegetables are being forced.

The final examination of the last term of another year began with the inspection of the college battalion by the Governor's staff, Thursday, August 14, and closed at noon the following day. Many left Friday, while others remained until the next day to attend the banquets in the evening, and to put the finishing touches on the year's work, while others remained until after commencement to see the seniors graduate and to learn how to act when their turn comes.—On Friday evening the Phi Delta Theta fraternity and the Eclectic and Olympic societies held

their annual banquets, with programs as follows: Phi Delta Theta; Music; President's Address, H. F. Hall; History, H. E. Bunce, Jr.; Music; Poem, V. H. Lowe; Society Paper, C. F. Rittinger.—Eclectic, Music; President's Address, W. W. Morrison; Prophecy, V. S. Hillyer; Music; Oration, R. C. Clute; Society Paper, W. M. Clute.—Olympic: President's Address, H. Z. Ward; History, A. A. Foster; Oration, J. W. White; Poem, H. B. Winegar.—At three o'clock Sunday afternoon a large crowd gathered in the chapel to hear the baccalaureate sermon by President Clute, who took for his text "My father worketh until now, and I work." He gave his hearers some excellent advice, which they will undoubtedly long remember.—On Monday evening the senior class-day exercises were held in the Armory, in which a tastily decorated stage had been placed on the north side. Long before the appointed hour a large audience had gathered to hear the literary program which was as follows: Music, Spiel's orchestra; President's address, H. L. Bunnell; Poem, H. F. Hall; Oration, C. F. Rittinger; Music, Spiel's orchestra.—At the close of the exercises those who remained adjourned to the chapel, where the gay seniors "tripped the light fantastic" until a late hour.—At ten o'clock Tuesday morning, a large number assembled in the armory to hear the commencement orations, the subjects of which were as follows: "A Plea for Africa," Warren Babcock, Jr.; "Recent Progress in Japan," Jessie I. Beal; "The Coming Mechanic," Frank G. Clark; "Electricity and Civilization," Joseph H. Freeman; "The Influence of America," Howard J. Hall; "Our Unwatered Empire," J. R. McColl; "City Government," Horace Z. Ward; "The Granary, the Porch of the Desert," A. Latcha Waters. The degree of Bachelor of Science was then conferred on each of the thirty-one members of the class, and the degree of Master of Science on Gager C. Davies, B. S. '89, for work done in entomology, Ned S. Mayo, B. S. '88, for work done in veterinary science, Kumawka Shoshima, B. S., graduate of Imperial College of Agriculture, Sapporo, Japan, H. E. Weed, B. S. '89 and W. S. Holdsworth, B. S. '78. A reception was given in the evening, to the members of the class and friends by President Clute. This closed the commencement exercises.

The sad news of the death of Mrs. MacEwan, wife of E. J. MacEwan, formerly professor of English Literature at this college, reached us recently. At a meeting of the Students' Organization the following resolutions were adopted and sent to Prof. MacEwan:

WHEREAS, We, the students of the Michigan Agricultural College, having received with deep and heartfelt regret the news of the death of your most estimable wife, it is

Resolved, That we extend to you our sincerest sympathy and condolence in this your great bereavement.

A. C. SLY,
V. S. HILLYER,
R. D. GARDNER,
Committee.

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.

Owing to a misprinted triennial catalogue, a few mistakes were made in the dates of graduation in the personals of last issue. If the victims of those blunders will hold their tempers, we will try to keep the personals correct in future.

'69.

Dr. C. E. Bessey presided at the meeting of the Society for Promotion of Agricultural Science at Indianapolis, in August. He has been repeatedly asked to accept the Chancellorship of the University of Nebraska, but persistently refuses to accept.

P. J. I. Wilkins's name appears among the names of the Faculty in Catalogue of Missouri School of Mines.

'70.

At the recent Republican Convention in Detroit, G. A. Farr was one of the orators to present the name of J. T. Rich. The Free Press states that he was one of the most eloquent orators of the day.

'71.

Dr. B. D. Halsted sent several papers to be read before the A. A. A. S., and the Society for the Promotion of Agricultural Science. His attendance was prevented by an accident which resulted in a sprained ankle for him.

'72.

C. E. Miller is the leading physician at Cadillac, Michigan. Carroll does not forget his Alma Mater, as he this term sends two students to increase our roll of the Freshman class.

'73.

C. S. Crandall, lately of M. A. C. Horticultural Department, is highly praised for his excellent work as Professor of Horticulture in Colorado Agricultural College.

James L. Morrice carries the purse for Emmet Co., and extends compliments to M. A. C. by sending two Freshmen to room in its halls.

'74.

C. M. McDowell is at present acting agriculturist at the Colorado Experiment Station until a Professor of Agriculture is appointed.

'75.

W. L. Carpenter was one of the counsel for plaintiffs in the Cofrode case, Detroit, which was given to the jury August 1st, after a continuous trial since March 24th. The presiding judge in his charge to the jury said that this was the longest trial ever held in

Michigan, and he thought the longest ever held in the United States. The plaintiffs were given a verdict of over \$90,000.

G. A. Royce, of Marquette, was one of the speakers at the late Republican convention in Detroit.

WITH '75.

R. M. Richardson of Magnolia, Iowa, who was at M. A. C. two years, writes that he is the owner of a farm against which the census taker could find no mortgage; and better still he has a wife and a ten-year-old boy.

'77.

Prof. W. C. Latta, connected with the Agricultural Department of Purdue University, Ind., was present and took part in the meetings of the A. A. A. S. and Society for Promotion of Agr'l Science. Prof. Latta has charge of the Farmers' Institutes in Indiana, and is making grand progress. He will hold twenty institutes during the coming winter.

'78.

Eugene Gregory is now editor-in chief of *Our Rural Home*, a lively agricultural paper published in Sturgis, Mich. Eugene's paper is sure of success as Mrs. Gregory is on the staff of editors.

Prof. W. S. Holdsworth of M. A. C. has taken his M. S. degree, which was conferred upon him at the recent commencement.

R. H. Gulley, the very popular teacher at Mason, Mich., has declined a pressing invitation to take charge of the public schools at Jackson, Mich.

W. K. Prudden is making quite a record as a jockey. He and his fast horses appear at almost every race in the State. Had we money, we would bet on Prudden's fleetness.

James Troop, professor of Horticulture and Entomology at Purdue University, was in attendance at the science meeting at Indianapolis in August. He enjoys his work. For several months during the summer Mrs. Troop suffered with severe illness, but is now convalescent.

'79.

A. A. Crozier of Ames, Iowa, in connection with his work on the experiment station, is preparing a bulletin on a botanical subject for the U. S. Department of Agriculture.

C. P. Cronk was made sergeant of Signal Corps two years ago, and was put in charge of the office at Baltimore, one of the most important offices in the country. He has three assistants. He has purchased a house, and hangs out a shingle inscribed: Dr. C. P. Cronk. He has been doing some work in the Johns Hopkins Hospital. His wife and child are spending summer in Detroit.

'80.

Prof. Frank A. Gulley has accepted the directorship of the Arizona Experiment Station and the presidency of the Arizona Agricultural College. His salary is \$3,300.

'81.

J. L. H. Knight, proprietor of Pleasant Hill Stock Farm, Lee Park, Neb., is a successful stock raiser. Last year he sold over \$1,700 worth of Poland China pigs. He sends us a catalogue for his second annual sale, which will occur October 22. Mr. Knight has been secretary of the Center County Agricultural Society for the past several years. At last fall's election he was elected as one of the Regents of the State University, receiving a majority of over 14,000 votes on the Republican ticket. He wishes THE SPEC. and M. A. C. success.

'82.

A. J. Chappell will remain at Alba, Michigan, another year as principal of the high schools. He has been elected as member of the Board of School Examiners for the next two years. His summer vacation was spent in attending the teachers' institute of his county, and in cutting cord wood as a muscle developer.

'83.

H. M. Weed visited the college recently.

H. W. Baird, lawyer at Grand Rapids, was present at the commencement exercises.

C. M. Weed was present at Indianapolis in August, and read papers before the A. A. A. S. Society, for the Promotion of Agricultural Science, and also before the Entomological Club. Of the last society he was chosen secretary.

'84.

Orel L. Hershisser of Erie county, N. Y., has, at the Detroit Exposition, one of the fine apiaries that are there on exhibition.

C. P. Gillette writes that he is pleasantly located with wife and two year old daughter, on the campus of Iowa Agricultural College. He enjoys his work as Entomologist of Iowa Experiment Station. He finds the "SPEC" interesting, and enjoys the part which tells him of his former class mates and friends. Mr. Gillette presented a valuable paper before the Society for the Promotion of Agricultural Science, which met in August, at Indianapolis.

Willis Leisenring has changed his address from Big Rapids to 127 Washington Street, Marquette, Michigan. He has a situation with a prominent druggist of that place.

'85.

C. B. Collingwood, at the recent commencement, had conferred upon him his M. S. degree by the Michigan State Board of Agriculture.

J. R. Newton writes: "By the time of the issue of September "SPEC," I shall have married Miss Lucy Ellis, a graduate of Williamston Female College." Mr. Newton's first wife died in March, '88, and since then he has been managing his own and his father's farms near Pendleton, S. C. At the same time he has been employed as assistant in the science department in the high school of Pendleton. We extend to Julius and his bride the congratulations of M. A. C.

E. R. Lake has resigned his position as Professor of Botany at Agricultural College, Corvallis, Oregon.

'86.

W. A. Kinnan has a clerkship in the war office at Washington, and occupies his spare time by keeping books for one of the business firms of the city. He is building a house with his brother, A. F. Kinnan, of '83, in the suburbs of the city.

E. A. Whitney and W. C. Clute, who were with '86 have gone to Ogden City, Utah, where they will practice law.

John W. and W. H. Clemons are in the agricultural implement business at Durand. They report success.

Mrs. Chas. Whitmore, nee Jennie Tower, has a daughter, born the 5th of August, '90.

'88.

Louis A. Bregger, florist of Chicago, was present at M. A. C. Wednesday of commencement week, and read a poem at the dedicatory exercises of the new U. L. S. building.

F. H. Hillman, of the Nevada station, has recently issued an interesting bulletin on the pear slug.

A. B. Cordley writes enthusiastically concerning his duties at the Vermont Agricultural College and Experiment Station.

L. H. Dewey has received an appointment at Washington as Botanist in the Agricultural Department. Salary, \$1,400.

'89.

H. E. Weed received last commencement his M. S. degree for work done in Entomology. The subject of his thesis was "Borers," seven new species of which he had discovered and described.

L. Churchill, student in the medical department at U. of M., has been present at the college this last week. He brings two freshmen with him.

F. N. Clark is in the employ of the American Express Company at Harrison, Mich. In paying his subscription for the next year he says that THE SPEC. is the best means of keeping account of the old boys and what the college is doing. He wishes it success, and also all connected with "our cherished M. A. C."

G. J. Jenks, in the employ of D. Tweed & Co., a New York house, spent a day or two at the college during vacation.

Tom. McGrath of Dennison, Mich., spent a few days at the college, at the close of last term, but returned to his farm before commencement, it being the busy season of the year.

Wm. Lightbody of St. Clair will attend the State Normal during this next year.

'90.

How the news spread so rapidly is uncertain, but the common talk among the young ladies of Cairo is, that John White will soon marry one of their number. Well, John, if that is so, here are our congratulations.

O. A. Turner paid a flying visit to Detroit on detective work, on Wednesday of last week.

WITH '90.

Will Hawkins, alias "Cupid" visited the college during commencement. He is in the employment of the American Strawboard Co., of Battle Creek.

Fred Robinson, of Grand Rapids, spent commencement week at M. A. C.

WITH '91.

Sam K. Boyd is farming near Grand Rapids this summer.

C. L. Crandell is developing muscle upon his father's farm near Linden, Genesee Co.

Elmo E. Meserve of Pomona, Cal., will soon take a trip to the Sandwich Islands in the interests of his father's nursery.

WITH '92.

Will. E. Hall, having become tired of single blessedness, ended that state of existence August 28, by taking unto himself a wife, Miss Emily E. Hamilton of Tecumseh, Mich. The happy couple have chosen Lexington, Kentucky, as their future home. Will, the best wishes of the boys of M. A. C. go with you.

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Is so busy removing to the new and elegant store built for him by Mr. P. L. Daniels that he has not time to tell the boys of the M. A. C. about his new goods. But he will be able to take care of all who are in need of Suitings, or any thing in his line.

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Wholesale and retail dealer in Fresh and Salt

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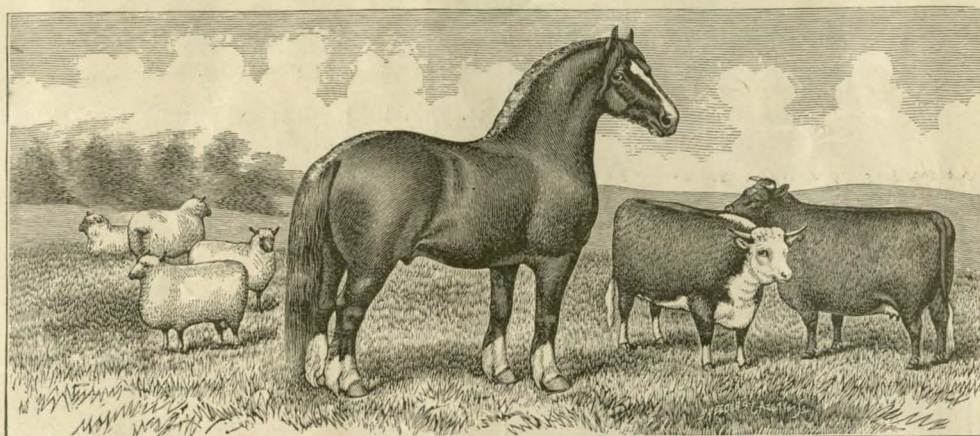
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DRUGS,
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"All that Glisters is not Gold."

We do not boast of a fine brick building and elegant parlors. Our Gallery is neat and commodious, and no better light in Central Michigan. After an experience of thirty-four years, and always doing my own operating, I claim the right to say that I can, I will, and I do make the **FINEST** photographs in the city of Lansing. Try me and see. It will cost you nothing if I fail. Special rates to all connected with M. A. C.

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Students, Buy your Writing
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Chairs, Tables, Cots, Mattresses,
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COWLES BROS.,
FURNITURE DEALERS.

Lowest prices in the city,

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THE DEEP CUT

Carries a complete line of **LADIES'** and **GENTS'** **BOOTS** and **SHOES** and **FURNISHING GOODS**. We are sole agents for the **HOOPER** and **GOVE HAT**. Also have in stock a fine line of **Military Gloves**, and we specially court the college trade.

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A large and fine line of
GENT'S HATS AND CAPS.

IN ALL THE LATEST STYLES.

JOHN HERRMANN,
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228 Washington Ave. N.,

Opposite Opera House Block,

Keeps the largest selection of fine Cloths
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STYLE AND WORKMANSHIP THE VERY BEST

U. H. FORESTER,

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Books, Stationery, Toys, Fancy Goods

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THE CLOTHIER.
Headquarters for Fine Clothing

Hats, Caps and Gents' Furnishing Goods
a specialty.

STUDENTS and OTHERS, Give us a Call!

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231, 233, 235, 237 Washington Avenue S., LANSING, MICH. Thorough, Well Equipped, Practical. One of the finest suites of rooms in the country, and a large, wide-awake Faculty. DEPARTMENTS—Commercial, Short-hand, Elocution, Type-writing, Normal, Penmanship. Expenses low. Don't decide to go elsewhere until you have sent for our Year-Book.

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WEBBER & BUCK.

WE CARRY ALL THE

Latest Novelties in Furnishings.

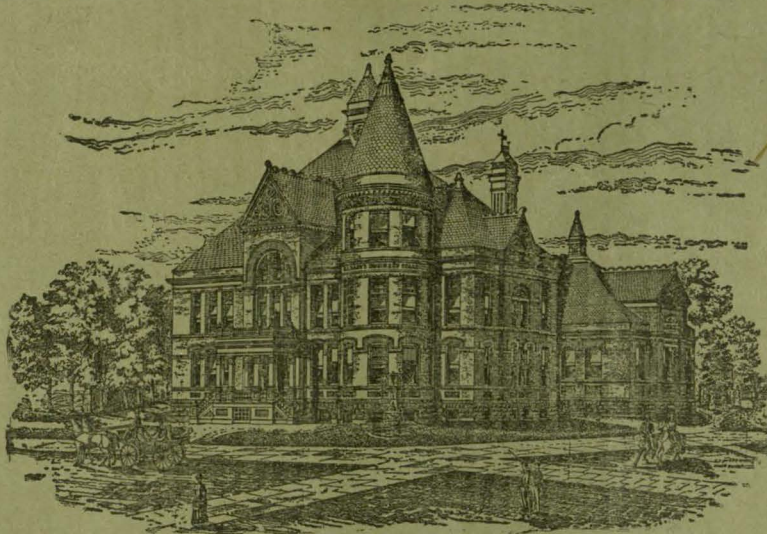
We are Sole Agents for the Celebrated DUNLAP HAT.

Special Attention Paid to College Trade. Call and See Us.

224 WASHINGTON AVE. SOUTH.

P. S.—Have just received a full line of Gordon and Stanley Sashes, and Gents' Fine Black Cassimere Underwear.

THE MOST PRACTICAL SYSTEM OF
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POSITIONS PROCURED FOR ALL
Short-Hand Students
WHEN COMPETENT.

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Michigan State Agricultural College.



P. O., Agricultural College. Express and Freight Office Lansing.

The institution has a teaching force of twenty professors and instructors, and is thoroughly equipped with apparatus for scientific investigation, and with machinery and tools for the use of students in the Department of Mechanic Arts.

The Library contains over 10,000 volumes, consisting largely of scientific works.

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FOUR YEARS ARE REQUIRED TO COMPLETE THE COURSE

—WHICH EMBRACES—

Chemistry, Mathematics, Mechanics, Drawing, Botany, Zoology, Veterinary, English Language and Literature, French, German, and Military Tactics.

From two to three hours labor on each working day, except Saturdays. Maximum rate paid for labor, eight cents an hour.

A "Summer School" for the accommodation of teachers and others who desire to study special branches for a few weeks. Summer students have all the advantages of the regular classes, and of individual work in the Laboratories.

RATES.—Tuition free to residents of the State; \$5 per term for non-residents.

Club Boarding, from \$2.25 to \$2.75 per week.

CALENDAR FOR THE YEAR 1890.

Monday, February 24, 1890, Spring term begins at 8 p. m., the first week continuing through Saturday. Friday, April 4, Examinations on the half-term studies. Thursday, May 11, Examinations begin. Friday, May 16, Spring term ends at noon. Monday, May 26, Summer term begins at 8 p. m., the first week continuing through Saturday. Thursday, July 3, Examinations on the half-term studies. Thursday, August 14, Examinations begin. Friday, August 15, Summer term ends at noon for all but the graduating class. Sunday, August 17, Baccalaureate sermon. Tuesday, August 19, Commencement. Monday, August 25, College year begins at 8 p. m., the first week continuing through Saturday. Friday, October 4, Examinations on the half-term studies. Thursday, November 14, Examinations begin. Friday, November 15, Autumn term ends.

1891.—Monday, February 23, Spring term begins at 8 p. m., the first week continuing through Saturday.

For Catalogue apply to O. CLUTE, President, or HENRY G. REYNOLDS, Secretary.