

# THE SPECULUM.

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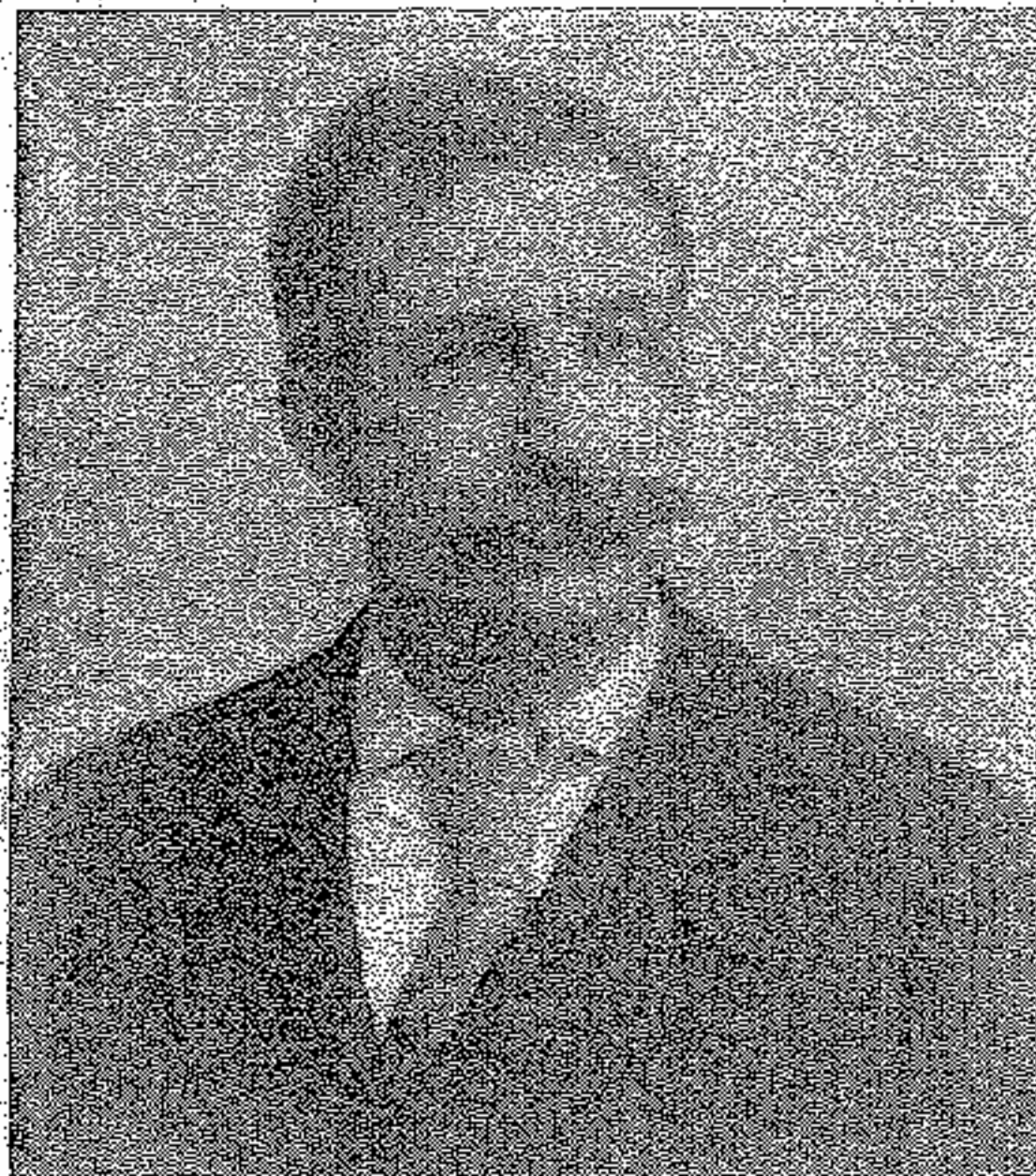
AGRICULTURAL COLLEGE, MICH., AUG. 10, 1893.

WHOLE No. 71

THE readers of THE SPECULUM will be glad to see in this issue a picture of Lewis G. Gorton, the president elect of this college. Professor Gorton though yet young has had such a degree of success in life that every young man in the state should be encouraged to press perseveringly onward confident that,

"If we only strive to be good and true  
To each of us all there will come an hour  
When the tree of life will burst in flower  
And pour at our feet her golden dower  
Or something better than ever we knew."

Mr. Gorton was born 1860 in Waterloo, Jackson county, Mich., and grew up six feet three inches high, with a proportionate weight of two hundred and fifty pounds. During his boyhood days he laid the foundations of that character that must win success, viz.: thoughtfulness and perseverance. His educational advantages were not the greatest, but they were such that he, with his inherent honesty, sagacity, was able to utilize them to his rapid advancement. He graduated from the Chelsea high school, then entered the State Normal at Ypsilanti, and completed his course with high honors at that institution at the age of nineteen. After graduation he accepted the position of instructor in the department of science in the Detroit High School. Here he taught



PRESIDENT LEWIS G. GORTON.

philosophy, chemistry, physiology, and astronomy. In about three years he accepted a similar situation in the Military Academy of Michigan at Orchard Lake. He next labored for two years as principal of the Duffield school, Detroit; then he accepted the principalship of the Bishop High School in the same city, which position he has held for the past seven years.

Mr. Gorton is a public spirited man and has made his influence felt very strongly outside of his professional work. At the age of twenty-three he married Miss Laura Russell of Detroit, and they have one child, a boy eight years of age. The professor's fraternal affiliations are with the Free Masons. Mr. Gorton comes highly commended by the Detroit press, Ex-Governor Alger and all who have been favored with his acquaintance.

The students of the M. A. C. extend to him a cordial welcome and wish him a very long and happy term of office, crowned with abundant success.

To many of our readers it may seem almost unnecessary to say anything regarding our new secretary, Mr. Butterfield, for he is a man who has been well known to the Agricultural College for many years. But, for the benefit of others who have not had

the pleasure of Mr. Butterfield's acquaintance, we present this brief sketch:

Mr. Butterfield was born in the county of Macomb, 1840, and there lived on a farm until 1862. During this time he laid the foundation for those traits of character which are most frequently found in men whose youth has been spent in industrious, thrifty, country homes, viz: honesty and perseverance. From 1861 to 1864, he spent in California. In 1865 Mr. Butterfield bought a farm in the county of Lapeer, which he still owns. In the management of his farm he turned his attention mostly to

the breeding of Short Horn and Holstein cattle, and Merino sheep. Although he has ever been a great lover of farm life, his sterling worth and interest in public affairs would not permit him to remain, "along the cool-sequestered vale of life" but, ever and anon, he has been called upon to act in some public capacity. In his own county he has been a leader in affairs relating to agriculture and has for many years taken an active part in the Lapeer County Agricultural Society.

For the past twelve years he has been on the Examination Board of the State Agricultural Society and secretary of the same for the past two years. During this time he has been secretary of the Short Horn Cattle Breeder's Association. He has also been secretary of the Association of Improved Live Stock since its organization, three years ago.

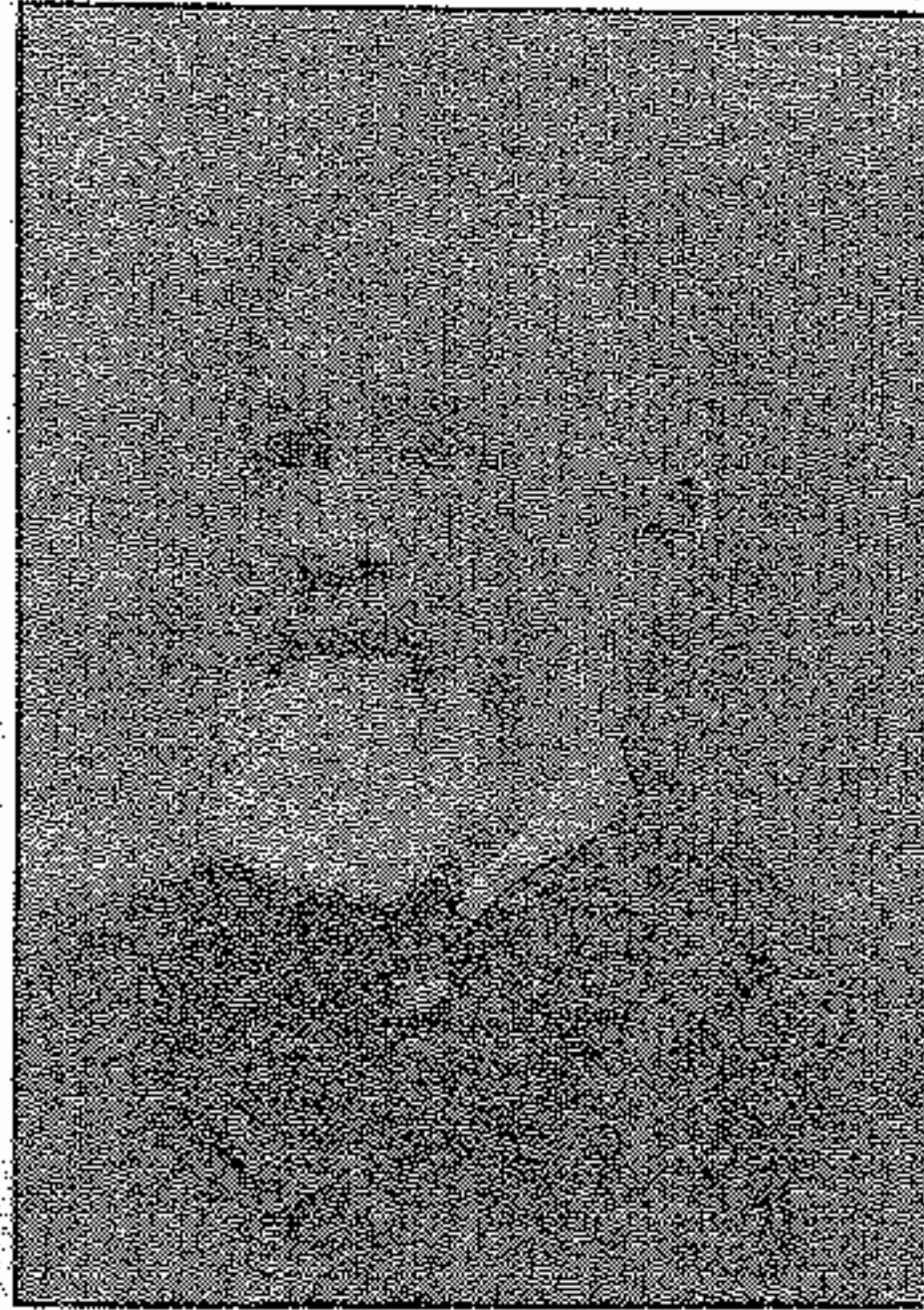
From 1880 to 1884 he was editor of the Department of Agriculture in the Detroit Tribune.

For the past three and one-half years he

has been appraiser of customs at Port Huron which position he recently resigned to accept the office he now holds.

The multiplicity of Mr. Butterfield's private and public interests have required painstaking and diligent labor, often compelling him to work eighteen hours per day. However, in all his dealings, he has gained the respect and confidence of the people.

We hope the same good fortune may attend him while he remains with us and that the arduous position so long and efficiently filled by H. G. Reynolds may be filled as long and equally well by Hon. I. H. Butterfield.



SECRETARY I. H. BUTTERFIELD.

undoubtedly result in much good. Professor and Mrs. Harwood's genial disposition endeared them to the hearts of their many friends, and as they take their departure from M. A. C. they are followed by the best wishes of the entire college population.

The college is to be congratulated on its good fortune in securing a man to take charge of the department of agriculture who is so eminently fitted for the position. Along with the portraits of President-elect Gorton and Secretary Butterfield, we are

In the July number brief mention was made of the acceptance of Professor Harwood's resignation of the chair of agriculture at this college, and of the appointment of Prof. Clinton D. Smith of the Minnesota Experiment Station to fill the vacant chair. The sudden acceptance of Professor Harwood's tabled resignation was a great surprise to many. His work the past term has been of a very practical nature and will un-



glad to be able to give a picture of Professor Smith.

This is what the *The North-Western Agriculturist* of Minneapolis, says of him: "He was born in 1854, on a good farm near Trumansburgh, New York. He came of sturdy New England stock, both parents being from representative families of the good old town of Enfield, Connecticut. His early life was spent on his father's farm, and when pursuing a scientific course at Cornell University, he put in his holidays as well as his summers at regular farm work. Instead of taking him away from the farm, the farm kept him in college and his labor on it enabled him to complete his course in 1873, and to take a master's degree in 1875, having pursued as special studies the sciences allied to agriculture. Professor Lacy, the first appointment to the chair of agriculture in the Minnesota University, and now manager of a big sheep ranch in Montana, was a classmate of Professor Smith, and Prof. W. A. Henry of Wisconsin, is a graduate of the same university.

In 1881, Mr. Smith became the owner and manager of the home farm, and with his brother set out to pay off a debt of \$12,000 with which it was encumbered. The neighbors were incredulous, and evidently expected to see the "book farmers" come to grief, and the farm go into the sheriff's hands, but seven years later the farm was clear of debt. The mortgage had been lifted by a well chosen and well managed herd of cows and a good article of butter, well sold. It was a case where knowledge had been put to practical use.

In carrying on this profitable dairy business, Mr. Smith and his brother were the first to apply in this country in feeding stock the German formula, and proving their practical value. The results were reported in the current numbers of the "Country Gentleman," and were widely copied by agricultural and scientific papers.

For some time Mr. Smith was an instructor in Cornell University, and in 1890 was appointed director of the Arkansas Experiment Station. In the winter of 1890 and 1891 he was called to Minnesota as director of the Experiment Station and professor of Dairying in the State University."

Professor Smith's duties begin at this college with the opening of our next term and all join in wishing him a long, happy and prosperous connection with M. A. C.

### Holidays.

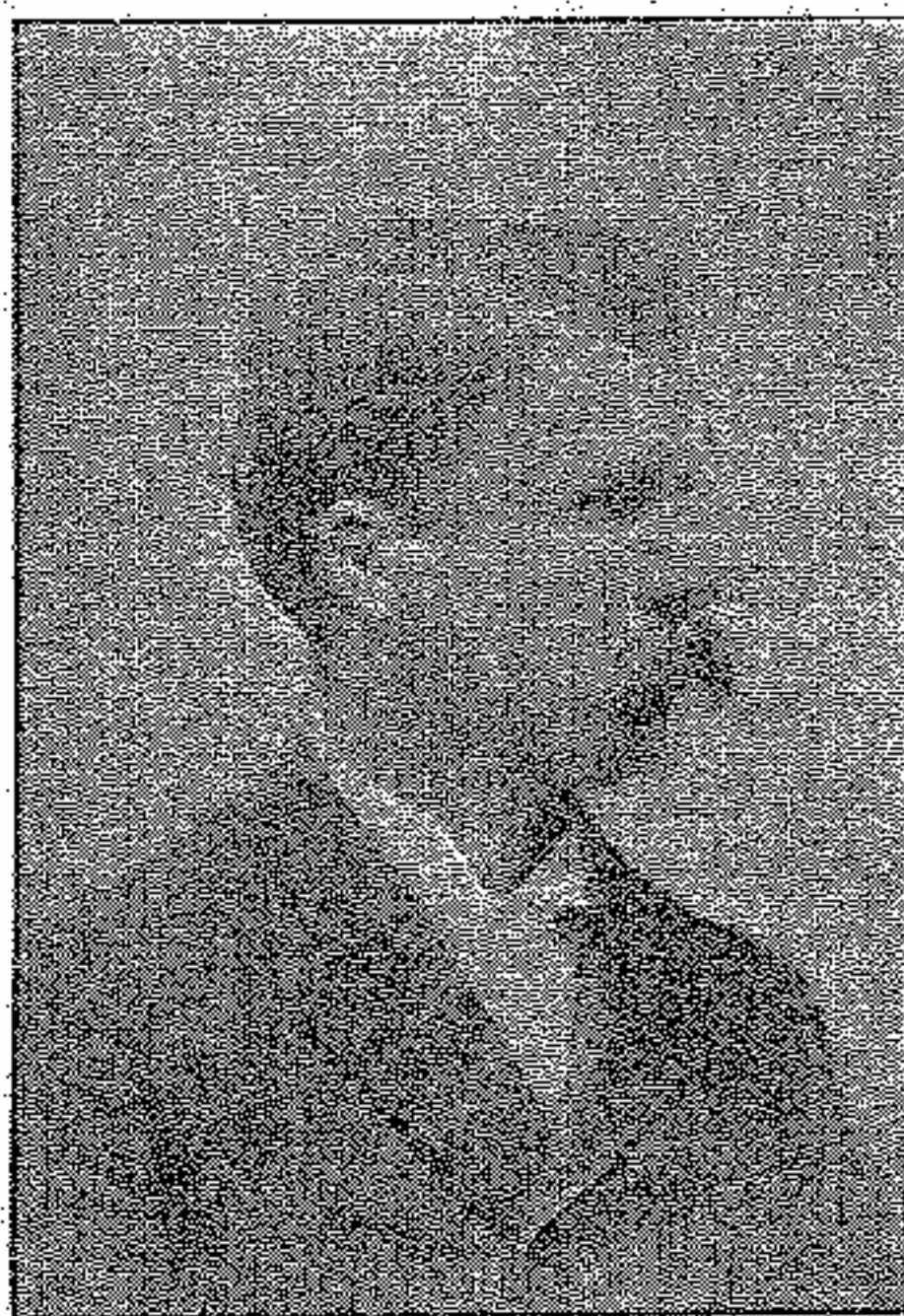
BY MAURICE E. KAINS, HESPERIAN SOCIETY.

The word "holiday" is familiar to all. Even in boyhood we felt despondent or elated as we thought of the past

outing or the one to come.

But how were these days spent? In summer we "killed time" at a horse-race, or in some other useless "sport;" in winters we read trashy literature, or wasted our time in "frivolous talk and deedless actions."

To the majority the term means simply a relaxation from school or business drudgery, — a breathing spell, alas, too brief. That this is not the proper view of the subject none can deny. Holidays were not set apart for the sole purpose of being wasted. Every one had a definite object when



PROFESSOR CLINTON D. SMITH.



"placed upon the market;" but, like uncorked wine, each has ceased to sparkle.

Let us examine impartially the principal days in their varied aspects. For convenience we will divide them into anniversary, commemorative, and religious holidays. The distinction is slight, but let it stand.

First in importance is July 4. All true Americans know its significance. It is the anniversary of the day when the infant United States broke loose from maternal restraint, and shaking his little fist, exclaimed "I am old enough to take care of myself!" But it was not without some pangs for ill-requited love and shattered hope, that he left Britannia's knee to seek his dubious fortune in a strange and distant land. Still, mid all the rebuffs of fate, his persevering has buoyed him up, till now we see the giant, strong and kind, whose mighty hand is always open to those who seek relief.

How is this anniversary honored? In enthusiasm, patriotism, and befitting splendors? No. A day is set apart and is mis-spent by the populace, who find it irksome to do anything beneficial to their neighbors or themselves. They sleep or waste the day at a picnic, where none can disturb their solitude, or excite them to mental exertion. Or they go to the opposite extreme, and again set a bad example by their attention to frivolity which often borders on vice.

The Fourth of July is the grandest day of the American calendar. Of all days it should be the brightest. Not alone are fire-crackers and sky-rockets enough to celebrate with; they should be merely adjuncts, fit for the "small fry," who are not old enough to enter into the deeper thoughts of patriotism. On that day enthusiasm should be worked up to the highest pitch. As the juvenile scrapes his little hoard for the noise-making of that day, so it should be with the older folks, to store all the energy they can, and without loss to themselves to impart it to their neigh-

bors, so that when the day arrives all will be at a patriotic white heat.

That this state of affairs does not exist is owing largely to the great mass of foreign people, who cannot be expected to enter heartily into the patriotism shown by the true American. But their children, if sent to school with those of the loyal American, would, long ere manhood, catch the spirit and rival their more favored playfellows.

There should be exercises in every school to create the nucleus of true patriotism in the young mind and the ideas of the magnitude of this great republic, and not, as is often the case, a useless and unnatural antagonism toward the mother country, whose interests and language are the same.

Yet in all this feeling for the present greatness of the nation let it not be forgotten that there are men who "seized the crisis and led to victory." It is but fitting that they should be honored by their country. The surest way to accomplish this is to teach in the schools the noble deeds of these great men, bringing them forward on the anniversary of their nativity, and briefly tracing their career. The children cannot help but be impressed, and, in their turn, will tell their parents.

As the greatest name, that of George Washington is the one the nation most loves to honor. Too often, however, the day is spent in apathy. If well conducted, military parades are excellent. But even here we find a draw-back. Those taking part are seldom volunteers. They go through evolutions merely because they have to, or else for pay.

Decoration Day is another festival which is not observed in a proper spirit. It is to commemorate a struggle, which, thirty years ago robbed many a heart of its joy and pride, many a town of its ablest and best. But it is said we live in the present, why should we remember the past? Even the bereaved are now "laid away in the shadow-village always growing silently and

ominously" nearer their once happy home.

Why? Because that conflict is one of the mile-stones in the path of civilization. It marks an era when the truth of the saying "all men are born equal" is coming to be realized. Therefore it should be celebrated with national splendor and solemnity. Not content with decking the tombs of the northern troops with the colors beneath which they marched to victory, let the southern grave be also honored, for, be it remembered that the southern troops were as true, brave, noble, as their northern foes. Foes? No, brother, for too often brother fought against brother, father against son.

But the woes of those "four brief years" are passed. The once broken hearts and desolate homes are now filled with a new joy. Now has come the day when all tears are wiped from all faces. Gladness reigns over a land at peace from shore to shore, and memory lights the heroes' camp-fire with a deathless fame.

"Who invented Arbor Day," and what does it signify? The plan was merely one that would encourage tree-planting, and, at the same time, dispense with the drudgery of its character by having a particular day for that purpose. That it is eminently successful may be shown by the number of states which have followed in Nebraska's wake.

But Arbor Day has spread beyond its primary object. Governor Morton, to quote Virgil, has "builded a monument more lasting than brass." The custom has been adopted by many public schools as an annual exercise. That this departure is particularly happy may be seen wherever there is a school enjoying its benefits.

To the child's sensitive mind the exercise is "a grand and impressive object-lesson"—a lesson in forestry and in education. More than this, the teacher, or the leader of the day, may characterize the nation, the state, the school, or a score of other things, comparing the growth of the one with that of

the other. Where would end the good drawn from these analogies?

With very little trouble on the teacher's part, the daily wonders of botany could be taught so thoroughly that the child would understand the marvels of the plant kingdom without apparent study.

That boys do not stay on the farm is to be regretted. But why is it? Is it on account of impoverished land, of parental unkindness, what is it? In the majority of cases, the cheerless homestead is to blame. The array of bleak farms along the country roads is unfortunately too striking. If enquiry be made, many will show an absence of one or more members who have gone to the city, where health is scarce, temptation plentiful, and where freedom of thought and will is always more or less checked.

But with Arbor Day held by the school the child gets interested in the ceremony and, by-and-by he asks permission to plant "just one little tree in the yard." More trees follow, then flowers, and ere long the "garden" looks better than the house. Then the house is improved to match the garden. When that child becomes a young man he does not say "I want to be a doctor, or a lawyer. I am sick of the farm." He does say "How could I bear to leave the dear old place where I planted those trees and laid out the garden when I was a little boy."

Such is the good that follows from the observance of Arbor Day. If the exercise were observed as it should be, by every school, there would be fewer poor lawyers and more true farmers to be the back-bone of this great nation.

Thanksgiving and New Year's though public holidays, are in most respects of minor importance. True, the churches in most sections of the country observe these festivals to a certain extent, but their importance is of a secondary nature when compared to Christmas.



As the name implies this day is a religious feast day, consecrated to the nativity of our Lord. Its importance is not bounded by a state, a nation, nor by a continent. It touches all humanity. Generations pass away, and with them the observance of fetes. Creeds change, and each sect observes its peculiar fast and feast days. Yet this one alone is left unchanged by sect or nation. For nearly nineteen hundred years its solemnity has been observed by all to whom the name of Jesus has been taught.

But to the masses, the "glad tidings of great joy" are but a name. The wealthy go to church to hear the "old, old story" and to admire the decorations. They then return to sumptuous feasts, passing, with a Levite's look, the half-clad beggar, shivering in the street. Thus they despise one of God's children who differs from themselves only in being less favored.

Why do we shrink from poorly dressed and starving creatures? It is because we do not treasure in our hearts the teachings of the Lord who came to earth "in great humility." The church, the sermon, the music—nothing earthly can fill the place of Christian charity. None but those who have tried know the joy which follows some kind act to a less favored brother.

Much more might be said, but to what avail? The only way to really keep Christmas is to seek a larger measure of that gift which all must possess to attain happiness here on earth and to inherit the joys of Paradise.

We have endeavored to show that holidays should be spent in awaking a love for nature, in arousing national enthusiasm, and in trying to imitate the great Master, our Lord and Savior.

The campus of Leland Stanford University at Palo Alto, Cal., covers 70,000 acres. It contains a driveway seventeen miles in length.—*Aurora.*

## The Student, Science and Christianity.

F. M. LEWIS, ECLECTIC SOCIETY.

A recent speaker said: "When the young man leaves home and enters college, he has left a place where the things taught him in school, and at home, have usually been in corroboration of Christian evidences."

If these are not his words their import is the same. On entering college he is subject to many perils. He throws off the yoke of paternal sovereignty, and the influences of home associations, and launches forth into the discovery of truth by his own investigations, but more or less led by the prejudices and persuasions of those guiding him in his pursuit of knowledge. But, as this speaker says, he must be permitted to investigate and weigh questions which arise in science and must reconcile them to the teachings received at the altar or the church.

A young man coming to a liberal institution like our Alma Mater, begins at once to see that many explanations of divine dispensation must be interpreted according to the phraseology of his several science professors. At once the authenticity of the Mosaic cosmogony seems questionable, and the seven days of creation sound mythical when viewed in the light of revelations made by his studies in the several sciences. But reconciling these differences upon the assumption that the Pentateuch was somewhat allegorical he goes on "conquering and to conquer" until he stumbles upon the doctrine of "evolution." Here he finds a doctrine so beautiful, so symmetrical in its entirety, that he pauses in dismay. Things are no longer what they seem. Here science and scripture seem to decidedly disagree. Analogies and allegories do not suffice to establish a reconciliation. Language, customs, intellections and physiological growth, all seem explicable from this new standpoint. But how man could have been born in the image of his creator, and at the

same time possess gill slits and so resemble the finny tribe, gives rise to questions of how are these disparaging differences between revealed theology and scientific inquiry to be settled.

Evidence is preponderable to show that man's present stage has been reached by his being subjected to successive changes in condition. Environment then has achieved his present greatness. Intelligence as Emerson says is void of affection and sees an object as it stands in the light of science, cool and disengaged. But even here evidences do not cease. Biology tells him that life springs only from life, and that life cannot be endowed upon the inorganic; that the kingdoms of the organic and inorganic are as far separated as black and white, so that the passage from one to the other is as impossible as for the camel to pass through the eye of a needle.

Questions of the immaculate conception and of the whole category of biblical teachings arise in doubt before the questioner.

Comparative anatomy tells him that man and the chimpanzee differ but little in their skeleton structure, and had the man taken the monkey's place at the time of their divergence, he might have been sporting around in the wilds of Africa instead of earning his bread by the sweat of his brow.

Now behold a student of simian language comes forth and announces that by persistent labor the primitive language of monkeys has been discovered. Their thoughts, emotions, and wants are expressed in a limited but forcible language. Thus these many things go to show that man is the production of circumstances.

These are some of the attitudes of science that face the young student when he is sent to a liberal college and told to investigate doubtful questions, but held steadfastly to the faith.

From the mass of knowledge the scientist takes only these things that are established

as truths, and from these must build up his histories of creation.

On the side of science we have such men as Prof. Huxley and Herbert Spencer advancing their results in scientific research and assuming a position of agnostic indifference towards Christian evidence. On the other hand the theologians cry "Unless ye be born again ye cannot enter the kingdom of heaven."

If then the student is to enter the realm of investigation handicapped as it were, by previous fixed opinions, he will only attempt to solve a paradox.

Thus it would seem if doctrines of evolution and other antagonistic ideas are to be advanced, they should be accompanied by other evidences of scripture if it is desirable to coerce the inquiring student.

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## SCIENTIFIC.

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### The Flat Pea.

(*Lathyrus Silvestris*.)

BY PRESIDENT O. CLUTE.

Those who have walked through the experiment station fields since the first of June, cannot fail to have noted the very luxuriant and beautiful plat of more than an acre in extent, of the new forage plant, the flat pea, (*Lathyrus Silvestris*.) It started early in the spring, every root having endured the severe cold of winter without injury. The tops were uninjured last fall by severe frosts. They did not stop growing until heavy freezes came. Indeed, where there was quite a covering of tops, and where the snow fell early and remained on the ground, those sprouts on the under side at the surface of the ground were not killed by the freezing of winter, but remained green until the plants began their new growth this spring. In some slight depressions in the field ice formed over the plants, and such plants seemed quite dead when the ice went off this spring. I



examined many of them, and for an inch or more down the crown of the plant was destroyed, and I thought such plants would give no growth. But soon the uninjured portion of the root sent out sprouts, and these plants have grown as vigorously as any.

The whole field started early and made a green and beautiful appearance. Then there came on a long spell of cold and windy weather, which kept everything back, hence it was not until late that the plants got down to work. Since then it has let itself loose, so to say, and grown in a reckless but determined fashion. Every root sent out numerous shoots which spread away on every side until the ground was covered with a dense mass. Then it began to climb up. The tendrils of one shoot caught on to all the neighboring shoots, and so they helped to support each other, and by June there was a deep garment of verdure more than three feet in depth.

One July a square rod of this forage was cut and yielded at the rate of sixteen and eight-tenths tons of green forage per acre. Cured it made at the rate of four tons of very nice hay per acre. Chemical analysis in Europe has shown a very high feeding value for this forage; greater than that of almost any other forage plant. The forage is eaten eagerly by all farm stock. It is reported from Germany that animals thrive on the forage, either green or dry. We have not yet been able to test this, but there is no reason to doubt it. The large yield of green forage per acre indicates that a field of flat pea will make excellent pasturage. And for ensilage it is of great value.

Of recent years much interest has been roused in regard to the faculty that leguminous plants have of secreting nitrogen from the air. This property is shown to be due to the small knots or tubercles that are found on the roots of such plants. Examine a root of growing clover and these tubercles are found in abundance. But the roots of

the flat pea surpass all plants, of which I know, in the great number of tubercles. Often they crowd upon each other over the whole surface of the root. It has been found in Europe that this plant has most valuable fertilizing properties, undoubtedly due in great measure to the action of these very numerous tubercles. The plant constantly enriches the soil upon which it grows.

Not only does it enrich the soil, but it is able to flourish on poor soil. Our flat peas were sown on the most sandy part of our farm. This soil had been well cultivated in former years and somewhat fertilized, but no manure has been given it since the flat pea was sown upon it two years ago, yet the plant has given the very luxuriant growth mentioned above. When one sees a freshly dug plant, with its hundreds of tubercles, he feels sure that if any plant can enrich soil, by secreting nitrogen by aid of tubercles, this one can.

Herr Wagner of Wurtemberg, Germany, introduced the flat pea. He observed that cattle ate the wild plant wherever it grew; that it had a most luxuriant growth even on poor soil; that it rooted so deeply as to be but slightly injured by severe drouths; that the top was not injured by drouths, and that the roots endured the coldest winters. He began experimenting with it, and all his experience for a number of years has been most encouraging. In the spring of 1891, I imported some seed, and sowed it in our experimental plats. The next year I imported a few pounds more, and our promising field is the result.

### New Insect Ravages.

A. J. COOK.

One of the discouraging features in economic entomology is the fact that new destructive insects are ever and again putting in an appearance, and generally these newcomers are terribly damaging in their work.



Thus the practical man—the farmer and gardener—must not only know and practice protective methods respecting the old enemies but he must be alert as to new foes, and must have that general knowledge, whereby he can meet and defeat the new pests that steal in to rob him of his hard earned products. Thus eternal vigilance is as much the price of thrift on the farm as of liberty.

There are two principal reasons for these attacks. First, new importations from distant parts of our own country, as witnessed in the Colorado potato beetle, or from foreign regions as exemplified in the cabbage butterfly, clover seed midges, horn fly, etc., etc. Darwin's law, that imported species of all plants and animals are likely to thrive, for a season at least, much better than indigenous ones is well borne out in these cases. The old potato pests are hardly known in these days, while if we do not fight the Colorado species, we go begging for potatoes. The closely related native cabbage butterflies *Pieris Oleracea* and *Pieris Protodice* hardly ever attract attention now, though unless we fight the new imported species *Pieris Rapæ*, we must go without our sauerkraut.

The second reason for these new invasions is that insects change their habits either from desire or necessity and attack some new plant. In some cases, the insect seems to learn to like a new vegetable, or to become more cultivated in taste, if we may so speak, and so feeds on a plant never before disturbed. In other cases, the old plants are cut down or destroyed, and the insect must perforce betake itself to a new food plant. Thus the Linden span worm used to defoliate the basswood trees, but now as the forests are removed it attacks with fearful effect, the leaves of the apple orchard. It is also possible that the introduction of a new plant, may lead to this changed habit of food taking.

We have just had in Michigan a most

interesting illustration, most probably of this last case. Celery which has been grown but recently in our State and country, is becoming a leading and very profitable crop. Our Michigan celery is becoming as famous as her apples and potatoes. Before last year the celery growers had little to contend against in way of insect depredation. Last season the old well known parsnip caterpillar *Popilio Asterias*, which has long been considered a not very serious enemy of parsnips, carrots and other umbeliferous plants, was reported from many sections of our State as a quite serious pest of the celery plant. Many of us have reluctantly tasted of the celery owing to its inviting appearance, to find it a most palatable relish, and a favorite table article. Can it be that this *Asterias* butterfly has been trying a like experiment with precisely similiar results? It seems curious that it should become all at once so prevalent in this new role of mischief. Fortunately we have in the arsenites a sure and cheap remedy for this new evil to our very profitable celery culture.

Within the last week, I have had numerous inquiries regarding a second old well known insect, but new enemy of the celery. Letters for five successive days, accompanied by the new invaders reached me from celery growers, expressive almost of consternation and crying for aid. This new enemy is the small negro bug *Corimelana Pulicaria*, which has been previously known as an enemy, though not a serious one, of the raspberry and strawberry. Most of us have seen these little negro bugs on raspberries as we have gathered them, and possibly were not always so fortunate as simply to see them. They have a rank odor, and may I say taste as well, which may well disgust the one who seeks to refresh himself at the raspberry or blackberry vineyard. These bugs gather close about the stems of the plants in clusters, and are formed to do serious damage, so much so that the celery

growers about Tecumseh and Kalamazoo are thoroughly alarmed.

As bugs are among the hardest pests among insects to destroy, we are not so hopeful in this as with the parsnip caterpillar. We may hope that kerosene emulsion, hot water or some other known, or to be discovered remedy will be effective. Mr. Davis went at once to the seat of war, and will try every weapon obtainable against these sable hoards. We may hope for a successful remedy at his hands.

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## THE SPECULUM.

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AGRICULTURAL COLLEGE, AUG. 10, 1893.

WHEN the old eagle sees that the time has come to let her young care for themselves she breaks up her nest and throws her children from the sky piercing cliff and watches with apparent delight the first efforts of her tenderly reared offspring as

they rise and fall upon their untried and unskilled wings. Even so the worthy board of editors who so faithfully performed their part during the past year stand now "on no mean eminence" with something akin to parental pride and arms folded in perfect complacency from a sense of good work well done while the new board spread their unfledged wings and venture cautiously out upon the untried aerial sea. If the days which look propitious continue fine they expect to return with their first edition at an early date with added strength and courage.

IN the quiet of our sanctum we make our bow to the many readers of THE SPECULUM. You are scattered far and wide like the stars of the firmament; some shining with a brilliant lustre; some so far away that we can catch but faint glimpses of the twinkling light, yet we know that these may be the centers of systems of thought, and light, and truth. Others we can no longer discern, they shone brightly for a time, or like a meteor shot across the sky, they are gone—either higher or lower—and think and act in new environment. May heaven bless all and though "men may come and men may go" let old M. A. C. go on forever. She is in her prime; sound, strong and vigorous. All her organs are in good condition and not a "SPEC" below the standard of the very best the country affords.

WHY do not the people of Michigan know our college better? Why are they not more benefitted by its work? Why do not more of our graduates become farmers? These questions and many similar ones are not uncommonly heard. They are of vital importance, and are worthy of more than a passing thought.

Situated in one of the leading states of the Union, among the most industrious and progressive people in the nation, upon a spot fitted by nature and beautified by art to



such a degree as to be the admired of all admirers, the Agricultural College of Michigan stands superb. "Full many a flower is born to blush unseen" and so to many people of Michigan their college is unknown. When some of our people visit us, as they chance to do occasionally, and look upon the exterior, such as grounds, buildings, equipments, etc., they exclaim, "I had not the least idea that this was such a place. It is beyond anything of which I had even dreamed." Oh, could they but see and hear and understand the workings of the interior, the instructions of the class rooms, could they but realize the growth of mind and the unseen forces at work upon these grounds and within those walls; the development of character, the freedom of investigation, the independence of thought, they would be filled with still higher admiration for the work of this institution. Alas, the majority of our people travel but little, they read our solid periodicals like the *Review of Reviews*, *The Forum*, THE SPECULUM etc., still less; many good citizens live and die in the same county in which they were born.

"Knowledge to their eyes her ample page  
Rich with the spoils of time did ne'er unroll."

The people and the college must be introduced, not only through the press and spectacular exhibitions at Farmer's Institutes, but by their visiting the institution, sending hither their sons and their daughters—yes, we say daughters, for the time is coming, it is not far distant when the better part of human nature shall not be excluded from these grounds and halls. Let them "Remember the rock from which they were hewn" and ever cherish a feeling of sympathy, reverence, and respect for farm life and all industrial pursuits. Then shall the fathers and the mothers give their sympathy to our college "measure for measure" and our first question will never more be asked.

In the second place the farming community is not more benefitted by our college for several reasons. First, there is that

lack of information and sympathy of which we have spoken. Second, the farmers as a class cling too tenaciously to old-time theories and methods, and pass by with sarcastic indifference anything that savors of books and colleges. When the clouds are scattered, and the mists have cleared away the glorious sun of agricultural science will shine in upon all our rural communities, and life shall follow light in all our borders.

In answer to the third question, "Why do not more of our graduates become farmers?" Several reasons can be given. Such as a lack of sympathy for agricultural pursuits; a lack of capital to engage profitably in agriculture, and so forth; but, perhaps the answer which will cover the great majority of cases is, that while here our boys become so disciplined, so developed, as to be in great demand in places where men of breadth of mind and large ability are required. Money they need. Money they are offered. And money makes them go. Do we blame them? No. But we say, let others come. Let more be educated, that, if possible, the demand for such men may be met and that the farms, too, may get their share. Cities are not able to supply the demand that the world makes for sound, honest, brainy men. The congestion of population in such places is not conducive to the highest mental development. The country must needs offer up her best and noblest sons and daughters that they may minister the "greatest good to the greatest numbers." Let her not mourn for these; but let her, as before suggested, give to those remaining the same opportunities that she has given to these, that as many as possible may go back again to the country and the farm, carrying with them the knowledge and ability they have here acquired.

1893 marks an epoch in the history of our nation. The Columbian Exposition and our financial affairs are matters of such great importance as to receive much notice from

future historians. But of greater interest to us than either of these are the events transpiring in our own college. The country does not stand alone in the loss of her bravest sons. The agricultural college, too, like the great commonwealth of which she is the head, has seen with tears, one after another of her brightest sons and most talented professors called away to serve on other fields. Words of cheer and victory oft come back to rejoice her heart yet she in losing these men of talent has made a great sacrifice. But we have faith in the Disposer of events and know that "Behind the clouds the sun is shining." Good men are being found to fill the vacant chairs. Students are as enthusiastic as of yore. Let the boys come from the city and from the country. Let them come with that determination to succeed in the battle of life that should thrill through the breast of every American youth, and they will find here the advantages they need for the complete development of body, mind, and soul. Bring the right material and in return receive the pure gold coin.

DURING the past four years President Clute has faithfully performed the onerous duties of his office. He came with the class of '93 and with them he will go. It is a class of which any institution and any president might well feel proud. It numbers forty-seven, five of whom are co-eds. Next Wednesday they speak their last "piece," hop their last hop, sing their last song and walk their last walk as students of M. A. C. and the class of '93. We bid them a fond farewell, but THE SPECULUM we trust shall go with them to brighten their pathway all through life.

WE would that every farmer in the State, and every farmer's son, could hear Dr. Kedzie's lectures to the Junior class in agricultural Chemistry. Many old foggy ideas would be banished forever, and a flood of light, would spread over many farmers

minds, enabling them to see clearly the straight and narrow way to make farming pay.

OUR Military Department, under its present management, is a credit to the college. The variety of movements given the battallion this summer has awakened interest among the cadets and elicited the commendation of those not connected with the department. The proposed encampment on Midway Plaisance during vacation will aid many to see the great Fair who otherwise would not be able to attend.

### COLLEGE NEWS.

It is with a feeling of trepidation that we take up our pen in our attempt to occupy the place so ably filled by our predecessor. We sincerely hope that the readers of the SPECULUM will forgive all mistakes and that they will help us to make the news column an interesting one to all readers, by sending in any items of interest that may come to their notice.

It is rumored that the class of '94 will wear the regulation senior tile next year.

The Battalion of Cadets will be reviewed by Governor Rich and Staff, Friday August 4.

Professor Clinton B. Smith, our new Professor of Agriculture, is expected here about August 20.

President Elect Gorton will make a short address at the close of the commencement exercises August 9.

Harvest is over and those who have had charge of the small grain experiments are busy figuring up results.

Plans for the new foundry and forge shop are being prepared and the building will be erected immediately.

July 24, the class in veterinary science saw Dr. Grange take a large fibroid tumor from the shoulder of a horse.

President Clute has given an interesting series of talks on Science and Religion at recent Sunday morning chapel services.

Professor Durand and wife of Cornell University, formerly Professor of Mechanics here, spent several days on the grounds lately.

The class of '93 is having a class album prepared containing photographs of each member of the class and the members of the faculty.

It is not unusual to see the heads of other institutions upon the grounds looking over our Faculty with the view of taking some one home with them.



President Clute visited the experiment station at Grayling during the week ending July 29. Operations there have been somewhat hindered by severe drouth.

The coming junior class will probably have German instead of French next year, although if a sufficient number desire it, opportunity will also be given to study French.

The *Lathyrus Sylvestris* grown on the college farm has produced over four tons of hay per acre. The hay is being analyzed by the chemical department but the work is not yet complete.

At a good deal of trouble and expense the Botanical Department is collecting and preserving full length specimens of all the grasses and weeds, for use at the farmers institutes the coming winter.

Friday evening, July 21, the Y. M. C. A. gave their mid-summer reception. A pleasing musical program was rendered, the intervals of which were spent in conversation upon interesting topics.

Nearly every day brings some alumnus upon the grounds, especially those from the west who come east to visit the World's Fair, and take advantage of the occasion to spend a few days at their Alma Mater.

People are taking greater interest in the spraying of fruit trees this year than formerly. So far this season there have been used in this state about five tons of copper sulphate where there was only one used last year.

We are sorry to learn that Professor Breckenridge has resigned his position here to accept the position of Professor of Mechanics at the Illinois State University at Champaign, at an increased salary. He will remove to that place during the coming vacation.

The Horticultural Department has been busy getting out a new list of Michigan fruits, which has been embodied in circular form together with a list of questions of interest to fruit-growers. These are being sent to all parts of the state to be answered and returned.

Saturday morning, July 22, the sophomore class in physics and chemistry, listened to an interesting and instructive lecture on the Uses of the Spectroscope given by Professors F. S. Kedzie and P. B. Woodworth. Opportunity was given to view the spectra of a number of different substances.

President-elect Gorton and wife spent parts of Tuesday and Wednesday, July 18 and 19 on the grounds. Wednesday morning President Gorton attended chapel for the first time and addressed the students in a few earnest and appropriate remarks which were heartily cheered.

Professor Harwood has procured a DeLavel "Baby" Cream Separator for use before the classes in agriculture. This is a very interesting and useful machine. It utilizes the principles of specific gravity and centrifugal force in separating the cream from the milk and works best while the milk is yet warm.

Through the efforts of Lieutenant Lewis and Professor Woodworth, the Battalion of cadets will be enabled to camp on the Midway Plaisance at the World's Fair grounds. They have obtained the tents of the State troops and will form a military encampment there August 18, remaining seven days, with the privilege of staying three more if they so desire.

The college has lately procured the collection of bird skins and eggs made by Dr. Morris Gibbs of Kalamazoo. This is one of the finest collections ever made in the state and consists of nearly 1,000 skins and over 2,000 eggs, representing 273 species of birds and 188 species of eggs. The collection is a very valuable one and will be a great addition to the college collection.

On July 11 President Clute received a telegram saying he had been chosen unanimously to the presidency of the Florida Agricultural College and directorship of the Experiment Station. After corresponding with the secretary of the board as to the support which will be given him in developing the college and station, and receiving satisfactory assurances, he has accepted the appointment and enters on his duties September 1.

The Chemical Department has issued Bulletin No. 99 on the soils of Michigan, giving the results of analyses of 38 different specimens of soils, embracing wheat lands, soils from the Peach Belt, soils from potato districts, celery soils, Jack Pine soils and general purpose soils. Special attention is called to muck lands for their special capabilities for raising celery, cranberries and peppermint. Some of the muck lands in the Upper Peninsula are especially adapted to the growth of celery.

The officers of the Students Organization for the coming year are as follows: President, J. W. Ritteringer; vice president, G. E. Simmons; secretary, R. C. Clute; treasurer, E. D. Partridge; M. I. A. A. Representative, G. E. Simmons; local fieldday manager, H. R. Allen; base ball manager, Professor Vedder; Foot ball manager, Professor Woodworth. The members of the Legal Board are L. B. Plummer, R. S. Woodworth, M. Carney, J. P. Churchill, J. D. Nies, V. V. Newell. The members of the Auditing Committee are C. J. Foreman, L. A. Wilson and H. D. Baker.

On Friday evening, July 21, Professor and Mrs. Breckenridge gave a delightful "home party" in honor of Mrs. Breckenridge's cousin, Miss Brown, which will long be remembered by those who were so fortunate as to be present. The home was neatly arranged for the occasion. The three main rooms of the house were used for dancing. On the east side of the front an addition was built covered with canvass and decorated with the stars and stripes, which made an elegant place for repose. About twelve o'clock refreshments were served after which dancing and singing were resumed until an early hour. The young ladies from Lansing came in a body chap-

eroned by Mrs. Dr. Shank. The party was one of the most pleasant ever given on the grounds.

Friday evening, July 14, was held the tenth annual union meeting of the societies and fraternities. Many were present from Lansing and a very interesting program was opened by a piano solo by Miss Loa Renner of the Feronian Society, followed by a sermon by C. E. Holmes of the Hesperian Society. The audience next listened to a violin solo by R. C. Bristol of the Phi Delta Theta Fraternity, which was followed by a recitation by W. G. Smith of the Olympic Society, a Characterization of Mark Twain by W. F. Hopkins of the Delta Tau Delta Fraternity, an oration by E. C. Peters of the Eclectic Society, and Town Topics by W. L. Cumings of the Union Literary Society. The program was closed by a selection by the U. L. S. Mandolin Club. After the union meeting the Delta Tau Delta Fraternity and the Eclectic and Union Literary Societies entertained their friends. All report a pleasant time.

The officers of the societies and fraternities for the coming term are as follows: The Union Literary Society, President, R. S. Campbell; Vice President, J. D. Nies; Secretary, J. S. Horne; Treasurer, G. N. Eastman; Marshal, E. D. Partridge. Of the Hesperian Society, President, C. B. Smith; Vice President, C. J. Barnum; Secretary, J. A. Clark; Treasurer, M. D. Owen; Marshal, G. E. Miles. Of the Olympic Society, President, C. C. Pashby; Vice President, C. P. Close; Secretary, I. R. Simmons; Treasurer, H. E. Ward; Marshal, R. E. Bateson. Of the Eclectic Society, President, H. R. Allen; Vice President, W. C. Stebbins; Secretary, E. L. Kirby; Treasurer, G. W. Williams; Marshal, E. L. Leinbach. Of the Columbian Literary Society, President, P. V. Ross; Vice President, R. A. Dofittle; Secretary, Z. Veldhuis; Treasurer, S. Fulton. Of the Delta Tau Delta Fraternity, President, W. F. Hopkins; Secretary, G. W. Rose; Treasurer, W. D. Groesbeck. Of the Phi Delta Theta Fraternity, President, W. C. Bagley; Secretary, W. G. Amos; Treasurer, J. W. Rittinger. Of the Feronian Society, President, Miss Lillian Wheeler; Vice President, Miss Emma Churchill; Secretary, Miss Loa Renner; Treasurer, Miss Mary Baker. Of the Natural History Society, President, R. S. Campbell; Vice President, J. D. Nies; Secretary, M. M. Thompson. Of the Young Men's Christian Association, President, D. D. McArthur; Vice President, E. V. Johnston; Corresponding Secretary, W. J. McGee; Recording Secretary, G. C. Van Alstyne; Treasurer, F. P. Normington.

Wednesday, August 9, the college will graduate the largest class in its history. It numbers forty-six, five young ladies and forty-one young men. The following are their intentions and expectations for the future: Benjamin F. Bain will draft for the Lansing Iron Works. Luther H. Baker will teach during the coming winter. George W. Benjamin will study law. Sherman J. Blake expects to draft for the Buffalo Forge Company. Lyman J. Briggs will take

a course in physics at Cornell University. Roy C. Bristol expects to obtain work in civil engineering. Alton C. Burnham will take work in the mechanical course at Ann Arbor. Claudius B. Chapin will study medicine. Albert B. Chase and Dick J. Crosby will attend the World's Fair and spend what they have made at the laundry business. Fred P. Clark will teach the coming year. Dwight Cole expects to follow work in mechanical engineering in some eastern manufactory. Albert B. Cook will farm at Owosso the coming year. Willard L. Cummings expects to secure work at civil engineering. J. B. Dimmick expects to take a course in engineering at Ann Arbor. H. M. Goss, undecided. E. B. Hale will take a position in the silk factory at Belding. O. B. Hall will study medicine at the Detroit Medical College. W. L. Harvey expects to take the medical course at Ann Arbor. U. P. Hedrick will remain at the college, working in the greenhouse and incidentally will work for a degree. C. E. Holmes will teach. W. A. Maxfield expects to study medicine at Ann Arbor. E. M. McElroy undecided. W. Paddock will go west and grow up with the country. O. H. Pagelson will remain at the college and take post graduate work in chemistry. H. F. Palmer will farm the coming year at least. W. W. Parker will take a course in chemistry at the University of Michigan. Joseph Perrien, Jr., will take a course in mechanical engineering at the University of Michigan. E. C. Peters will work with his father in Saginaw at the printing, publishing and binding business. R. B. Pickett will teach school at Mendon, St. Joseph county. F. J. Porter, undecided. Emile Smith will take a course in electrical engineering at Cornell. W. G. Smith, undecided. V. L. Steward will spend a few months, at least, in Southern California. A. T. Stevens will teach the coming year. E. N. Thayer will accept a position with a firm of architects in Grand Rapids. W. W. Tracy, Jr., will be in the employ of D. M. Ferry & Co., Seedsmen of Detroit. L. W. Watkins will farm the coming year and then take scientific work at Ann Arbor. J. T. Wight is undecided. V. J. Willey will take scientific work at Ann Arbor. Miss Katie Cook will continue her studies in California. Miss Daisy Champion will teach. Miss Jennie Cowley expects to teach. Miss Lucy Clute will assist in making one of those bright and happy homes which are a blessing to every community. Miss Lillian Wheeler will take post graduate work here for a time at least.

THE SPECULUM should be read by every student; it is the students organ in which they have liberty to freely voice their sentiments. It should be read by every alumni who would keep well informed regarding his Alma Mater and who feels a deep interest in her welfare. It should find its way into all the intelligent homes of our state for its columns are ever found to be full of bright, interesting and progressive ideas.



## 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.

'62.

President Clute has accepted the presidency of the Florida Agricultural College and the directorship of the experiment station, both situated at Lake City, Florida. He will leave for his new field of labor about September 1.

C. A. Jewel, Jr., a son of C. A. Jewel of the class of '62, recently entered the college as a freshman.

'70.

Henry G. Reynolds and family are at Traverse City. Before leaving for California they will spend some time in Chicago.

'76.

S. P. Tracy (M. D., Hahnemann Medical College, Chicago, '86), is practicing his profession at Milford, Nebraska. Notwithstanding the fact that he has been at Milford but a short time he is meeting with the best of success.

'78.

C. C. Georgeson of the Kansas Agricultural College, has recently purchased over 800 acres of land in southern Missouri and contemplates planting a mammoth orchard.

James Troop, Horticulturist of the Purdue University Station, a room-mate of Professor Georgeson when at M. A. C., is investing in real estate as well as looking after the fruit and bugs at the University.

'79.

C. B. Charles is an M. A. C.'s man who returned to the farm after receiving his college education. He is situated at Bangor, Van Buren County, and is very successful. W. H. Goss, '82, is also farming at the same place.

'80.

W. W. Remington is spending the summer at his Alma Mater. He is taking special work in physics.

'81.

C. W. McCurdy, Professor of Chemistry in the new University of Idaho, spent a few weeks at the college in July. Besides holding down his position upon the faculty of the University, Professor McCurdy is encouraging athletics among the students and proposes to form a Students' Organization patterned after that of M. A. C.

Professor Chas. McKenny of the English Depart-

ment, Olivet College, spent a few days with Dr. Kedzie recently. He preached in the college chapel July 9.

'83.

Prof. H. A. Danville of the Filer City, Manistee County, schools, is taking special work in the Department of Chemistry.

'84.

W. C. Stryker is tilling the soil at Dayton, Berrien County.

C. E. Smith of '84, is engaged in the real estate business at Waukegan, Ill. He owns a half interest in Morenci Home, a first class World's Fair hotel, located on 79th Street, a few blocks south of the Fair grounds.

Oriel Hershiser of '84, has charge of the bee and honey exhibit from New York State at the World's Fair. He is located in the Agricultural Building where he will be pleased to have any of his old friends call.

'85.

E. R. Lake, Professor of Botany at the Washington State Agricultural College, and for some time past acting president of that institution, spent a few days at the college recently. Besides his work as a professor, he is also interested in a large fruit ranch in Oregon.

J. D. Towar, Professor of Agriculture at the Rhode Island Agricultural College, expects to visit M. A. C. at commencement.

Prof. J. W. Matthews of the Grand Rapids schools is again with us for the summer. He is taking post-graduate work with a master's degree in view.

Hiram T. French and his wife, Mrs. Carrie M. French, '87, visited friends in Lansing recently. Professor French is still at the Oregon Agricultural College, Corvallis, Oregon, where he occupies the chair of Agriculture.

'86.

C. F. Lawson is paying teller at the Peninsular Savings bank at Detroit.

Professor Woodworth spent July 14 and 15 at the World's Fair inspecting especially the electrical exhibit.

'87.

Irving B. Bates was married July 12 to Miss Bessie Ray Johnstone at the bride's home in Port Huron. Mr. and Mrs. Bates will be "at home" after September 1, at 1205 Seventh street, Port Huron.

'88.

Ned S. Mayo, D. V. S., professor of veterinary at the Kansas State Agricultural College, visited his Alma Mater recently.

H. E. Harrison will go to Chicago "with the boys" during the August recess.

L. H. Dewey of the Department of Agriculture at

Washington expects to visit the college in the near future for the purpose of consulting Dr. Beal in regard to grasses.

Born, June 30, 1893, to Mr. and Mrs. C. H. Redman, a daughter, weight 8 lbs. Mr. Redman writes as follows: "I am still with the city engineer of Grand Rapids, this being my fourth year."

L. C. Colburn, professor of mechanics in the University of Wyoming, paid the college a visit in July. Professor Colburn likes the work in Wyoming but he would not care to make the West a permanent home. He expects to return to his farm in Michigan in the near future. His department at the university is now quartered in a new laboratory which cost \$20,000.

Louis A. Bregger of Hyde Park, Ill., heartily endorses the plan of the college reunion at Chicago in August. He also suggests that an M. A. C. register be kept in the Michigan building. He will be at the Michigan building himself, every noon where he will be pleased to meet all college people.

WITH '88.

Joseph A. Thompson is with the Union Trust Company of Detroit. He resides at 292 Sheridan avenue.

'89.

L. A. Clinton is the lucky man this time and certainly deserves to be congratulated. A few weeks since he received an offer of the Assistant Professorship of Agriculture in the Clemson Agricultural College of South Carolina at a salary of \$1,200 per year and house. He will enter upon his new duties in the middle of August. We are all sorry to lose Louis but rejoice in his well-earned promotion.

Prof. W. H. VanDervoort received the degree of Mechanical Engineer from Cornell University in June.

E. N. Pagelson spent a few days with his brother, O. H. Pagelson, '93, recently. He is surveying in Kentucky with headquarters at Pineville. Before visiting M. A. C. he spent two weeks at the World's Fair.

George McPherson and Geo. L. Chase are both employed in Detroit banks. The former is with the Detroit National Bank; the latter is receiving teller of the Commercial National Bank. Both are doing well.

A. D. Baker is assistant secretary of the Michigan Millers Mutual Fire Insurance Company of Lansing. He and R. S. Baker, also of '89, expect to visit Chicago together in August.

P. G. Holden is farming at Oviatt, Mich. He visited Chicago recently and is enthusiastic over the World's Fair.

F. J. Niswander of the University of Wyoming will probably pay us a visit while inspecting the World's Fair in September.

Waldo Rohuert is employed as foreman on the flower-seed farms of C. C. Morse & Company, Santa Clara, California.

'90.

R. B. McPherson is with the McPherson Bank of Howell.

Horace Z. Ward spent July 26 with his brother, H. E. Ward, '95.

Charles Ferris is with the city engineer of Grand Rapids. He expects to return to his home at Knoxville in September.

Howard J. Hall, Principal of the Preparatory Department of the University of Arizona, visited friends at the college recently. He is looking forward to a position in the Literary Department of the University.

Jay R. McColl, Professor of Mechanics in the University of Tennessee, is spending part of his vacation in post-graduate work in the Mechanical Department.

WITH '90.

J. H. Wheeler is cashier of the Oklahoma Bank at Guthrie, O. T.

C. E. Burns is with the O'Brien Detective Agency of Detroit.

WITH '91.

C. F. Weideman paid the college a visit July 7. "Broady" was on his way to the World's Fair, but expects to return in time for commencement.

J. E. Manne is clerking in Lansing. He boards at 126 Larch street, south.

H. Arnold White was on the grounds July 7 and 8. He is studying law in Grand Rapids.

W. K. Sagendorf spent five weeks during June and July at the World's Fair. He will be at college during commencement week.

W. P. Hawley is at his home at Fenville, Allegan county. He expects to "take in" commencement.

C. A. Hathaway, principal of the East Tawas schools, is another '92 man who intends to see '93 graduate.

W. E. Palmer paid the college a visit recently. He reports a prosperous business (with plenty of hard work) at the Clover Condensed Milk Works, Northville, of which establishment he is superintendent.

C. M. Connor is an assistant in agriculture at the University of Missouri.

J. E. Hinkson finished his first year in the department of Medicine and Surgery at the U. of M. in June.

C. R. Winegar spent two weeks at Chicago during July. He expects to enter the U. of M. next fall.

WITH '92.

L. B. Allison who resigned from the United States Naval Academy recently, intends to visit Europe this fall.

WITH '93.

J. S. Mann is taking care of his father's orange groves at Glenwood, Valusia county, Florida. He is



undecided about returning and finishing his course at M. A. C.

O. E. Wilbur is spending the summer at Chicago.

WITH '94.

M. M. Chaffee has a good position with the Detroit Dry Dock Company.

B. W. Longyear is in the drug business with his brother at Mason.

WITH '96.

C. Sharp pushed a wheel chair during the first two months of the exposition. He expects to enter Oberlin College next year.

## ATHLETICS.

In assuming the work of the department we can but hope that it shall lose none of the prestige which it has acquired under the able management of the retiring editor. If we are able to bring to the notice of the reader accounts of the chief happenings in our sporting world; and if we are able to act as purveyor of public opinion in matters relating thereto, dropping a word of appreciation here and there and suggesting needed changes, the column may not fall entirely short of usefulness.

A glance at our surroundings reveals many things that speak the necessity of a more business-like care of our athletic interests. Much of the equipment is out of repair. The ball ground shows neglect. New bases are needed and a new supply of hats should be procured. The condition of the track so strongly spoken of in the last issue remains the same. The track represents too much money to be thus neglected. The boundaries of the foot ball grounds are lost and the goals are ready to topple over. A closer application of the principles of business to our finances is needed. Athletics have been mainly under the control of the Students' Organization, but a committee was appointed some weeks ago to inquire into the matter and report some plan of forming an association which shall have exclusive control of athletics. The committee is yet alive though it has given no signs of animation.

The theory of a separate association is correct in one regard, as the Students' Organization has more powers and duties enumerated in its constitution at present than it can profitably handle. On the other hand it is to be remembered that our athletics alone, and those most openly interested in athletics, can not support such an association.

There is no man among us, however phlegmatic he may be, however onerous at tax collecting time, whose whole being does not tingle, and whose step does not grow lighter when our boys return—victorious or vanquished—from honest contests in skill and physical endurance. Students, study the situation, and when the committee submits a report let the student body act wisely.

The series of class games like those in progress at this time last season has been allowed to drop, and as a consequence our players are entirely out of practice. The result of a game with outside parties would be almost a fore-gone conclusion.

On Saturday, July 22, a game was played on the grounds with the team of the Auditor General's Office, assisted by some outside talent. The visitors were quite tardy and additional time was lost in conceding to the Auditors the men from outside the office. Several bus loads came from Lansing bearing the yellow and white. Cheering was liberally indulged in but lacked the stimulus of victory with those schooled in the art. We noticed a slight tendency towards personality that should be discountenanced in amateur games.

M. A. C.	AB	R	BH	PO	A	E	AUDITORS	AB	R	BH	PO	A	E
McElroy, 3 b...	5	0	2	3	1	3	Woods, 3 b....	7	3	3	2	0	0
Simmons, c.....	4	1	1	10	2	1	Lutherp,.....	7	2	3	0	5	3
Rittenger, P.,	4	1	1	1	3	1	Morresy, c.....	7	3	5	17	9	0
Ansorge, 2 b...	4	0	1	3	2	1	Smith, c f.....	7	3	1	0	0	0
Stowe, 1 b.....	4	0	0	10	0	2	Quick, r f.....	6	2	1	0	0	0
Beauvais, s s	4	1	1	0	4	4	Eaton, 1 b.....	6	1	3	5	0	0
Crosby, c f.....	4	0	1	0	1	1	Owens, 2 b.....	6	1	2	2	0	0
Hale, s f.....	4	0	0	0	0	0	Lyons, s s.....	6	1	1	0	0	1
Nies, l f.....	4	0	2	0	0	0	Northrop, l f...	6	0	1	1	0	0
Totals	37	3	9	27	13	13	Totals	58	16	20	27	7	2

Two base hits, Woods, Morresy, Eaton, McElroy. Three base hits, Luther, McElroy. Home runs, Smith. Bases on hit by pitched balls, Fisher, one. Bases on balls, Rittenger, one; Fisher, one; Luther, Two. Struck out by Luther, seventeen; by Rittenger, four; by Fisher, four. Wild pitches by Fisher, one. Time of game 4:20 P. M. Duration of hrs. 20 minutes. Umpires—Harvey for M. A. C.; Graves for Auditors.

	1	2	3	4	5	6	7	8	9
AUDITORS	6	4	0	1	3	0	2	0	16
M. A. C.	0	0	0	0	1	0	0	2	3

Much credit is due Luther of Olivet who aided by our boys' lack of practice, struck out 17 men; also to Woods, once of the famous Cuban Giants who batted with terrific force to safe places. The fielding was very poor. Several shifts of positions were made in the home team. Beauvais was sent to left field while Nies played short stop. In the seventh Fisher went into the box for two innings while Rittenger played first base. In the ninth Ansorge occupied the box; Rittenger second base, Crosby first base, Fisher center field. Our team played with a will till the close.

Among the officers chosen at the Students Organization elections July 28 were Professor Vedder, base ball manager; Professor Woodworth, foot ball manager; Geo. E. Simmons, representative on the M. I. A. A. board of directors; and Welsh as local field day manager. J. Niswander has been chosen assistant base ball manager by the team.

Tennis is as popular as ever at the College this season and considerable talent in that direction is being developed. On the afternoon of Wednesday, July 26,



Messrs. Cook and Thurtell of M. A. C. played a tournament at Lansing with Hickey, a U. of M. man, and A. D. Baker, class of '89 at M. A. C. The play was to be the best two out of three, but the Lansing club losing the first two sets, desired to make it best three in five. A compromise was made by immediately beginning a new best two in three. M. A. C. was again the winner. Score by sets as follows: 6-3, 6-2; 4-6, 6-3, 6-3. The players had the advantage of playing on one of the best grass courts in the country. Our representatives report a pleasant reception. At 4:30 P. M. August 1, a return tournament will be played on the court near the Terrace.

On Saturday afternoon, July 29, the seniors and freshmen played a very exciting and closely contested game of base ball. It was valuable in that it gave some indication of who our coming men are to be. Featuers of the game for team pit had well striking out a number of men. Bateson made a fine tagger and a second home run on a wild throw. Clute played better than usual at first base.

SENIORS.		FRESHMEN.	
McElroy	pitch	Beauvais	
Hale	catch	Simmons I. L.	
Stevens	first base	Clute	
Cummings	center field	Anderson	
Watkins	third base	Partridge	
Crosby	short stop	Davis	
Briggs	left field	Bateson	
Smith, W. G.	right field	Eastman	
Stowe	second base	Parmalee	
Maxfield	sub	Fisher	
	1 2 3 4 5 6 7 8 9		
Seniors	5 3 3 1 1 0 2 1 2	18	
Freshmen	2 2 1 0 6 3 0 6 ~	20	

COLLEGES AND EXCHANGES.

This is the time of year when the exchange column of a summer school paper is necessarily without any items. All other colleges have been closed for six weeks and we have received hardly an exchange in all that time. Consequently we have no news for this issue.

"We, the undersigned, believe that concerted student action can do much towards raising the standard of honor here in regard to university work, and further believe that such elevation of the moral tone would be greatly for the best interests of the university. We, therefore, wish to form an organization for the purpose of such improvement, and pledge ourselves to further its object by every effort entirely consistent with honor." The above resolution appears in one of our eastern exchanges, and shows the feeling of many of our colleges against cheating. It is a step in the right direction, and will, ere long, raise the standard of truth and honesty in our American schools.—*Thielensian*.

All Lansing men will be especially benefited by advertising with us, for our boys are loyal and will patronize the men who take some interest in our college.

If you are a physician and wish the most desirable patronage in the county give us your card.

Publishing houses wishing to advertise their literature or secure the brightest and most energetic young men for agents that the country affords should patronize our advertising columns.

Business Colleges and Musical Academies having an eye to securing students for the winter months will place their ads with us.

Manufacturing companies of all kinds can secure no more efficient aid from any source than from among the young men of our mechanical course.

Modern inventions can in no better way be brought to the notice of the public than by advertising in the organ of the students from all parts of this and other states and countries.

School boards desiring wide awake progressive teachers for their winter term of school should make their wants known to us.

We invite correspondence from all sources and shall give careful attention to all communications.

What we say to these, we say to all who wish to keep in the front. Advertise in THE SPECULUM.

Do not forget the suggestion contained in the "College News" department of last issue, viz: That on Monday, August 21, all M. A. C. people who are at the Columbian Exposition on that date meet in the Michigan Building at 10 o'clock P. M. "Miss not the occasion" for it gives promise to alumni and students to be one of the most enjoyable gatherings that Chicago shall have seen. Right in connection with this it has been suggested by Louis A. Bregger of the class of '88, that every M. A. C. man ought to register at the Michigan Building as soon as he arrives, and whenever possible spend the noon hour at that place. This will result in very many happy reunions and prevent much anxiety and search for longed-for friends.



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This excellent advice, given by Polonius to his son, is indeed of interest to all of us. One of the best ways to accomplish this is to call in when down again and ask to see one of these shoes. Think they will please you.

## \$2.50.

A genuine calf shoe with dongola top, oak tanned soles, solid counters and inner soles, sewed throughout with silk and finely finished, usually sells for about three dollars and a half, and such a shoe is a bargain at three dollars. We have such a shoe which we sell for TWO DOLLARS AND FIFTY CENTS, either lace or congress, and comes in three widths.

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We think there must be a good many ladies at the college who wear shoes. Every week we sell new customers. Ask to see our French Process Shoe sometime. Made from fine dongola stock, lasted by the new process—without tacks. We recommend these for very fair service, and one of the most comfortable shoes produced. Widths B to EE. Opera and square toe, tipped or plain.

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# About Advertisements.

FELLOW STUDENTS, now, as in the past, let us patronize those who patronize us. Let men who appreciate the value of our trade enough to advertise with us have our patronage. Merchants, Physicians, Publishing Houses, Business Colleges, Musical Academies, School Boards, Teachers' Co-operative Associations, and all Employment Bureaus, Barbers, Livery-men and Hotel Proprietors—all should send in their ads. to the SPECULUM. If you do not believe it, try us and be convinced.

# ELGIN MIFFLIN

THE season has arrived when you will want Outing Shirts and Lighter Underwear. In looking for a place to supply your wants I desire to call your attention to my stock, believing it the largest and finest shown in this city, and at right prices. Bicycle Hose, Belts, Sweaters, Summer Vests. My Hat Stock is unusually large and complete and when in need of anything in the line of headwear come in and let me show you through my stock. For anything in the line of Gentlemen's Fine Furnishings you will always find my place headquarters. Students patronage respectfully solicited.

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The curriculum of study comprises three compulsory annual graded courses, with a fourth optional year. Preliminary acquirements required for admission.

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