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WHOLE NO. 64.

Should a Young Man Follow Science.

A. A. CROZIER, '79.

One of Michigan's brightest investigators has said that every man ought to answer some of the questions he asked when a boy. To make some addition to human knowledge is certainly no more than a fair return for the intellectual advantages to be enjoyed by everyone in this age of the world. It is not enough to impart to others information which already exists. Some one must broaden the field of knowledge, devise better methods in every department of effort, invent more and better machinery, and bring to greater perfection the crops of the farm and garden. Surely labor of this kind is in the highest degree useful. Why, then, do so few make it a serious part of their life work? It cannot be because such work is disagreeable. The thirst for knowledge, which every youth possesses in a greater or less degree, is not satisfied by what is known but leads one eagerly to search the unknown. Neither is scientific work particularly difficult. It seldom requires greater intelligence or ability than other pursuits. The simple and obvious fact which explains the fewness of its followers is that purely scientific work doesn't pay. So long as supply and demand determine profit, how can a business be profitable in which both these factors are either wanting or unknown? The investigator, from necessity, cannot tell what the outcome of his efforts will be, and the public cannot be expected to pay for what is unknown or untried. Generally, it is only after an invention or discovery has passed beyond the experimental stage and become the product of ordinary labor that its commercial value can be determined.

The scientist must cease for a time his proper work and become a manufacturer if he insists upon ascertaining and securing the actual money value of his discovery. This makes it necessary that scientific work should nearly always be incidental to other pursuits.

There are other reasons, also, why this should be so. Among these is the fact that one cannot long maintain mental and bodily health in exclusively scientific work. Association with others of similar pursuits is essential to one's well being. The scientist is from necessity, in a certain sense, a hermit; and if he would avoid unpleasant results he must not withdraw himself too continuously from the common affairs of life. Few will therefore risk losing money, health, and happiness by cutting adrift upon the sea of scientific discovery. However, one cannot quite believe that the progress of science and the good of society demand such sacrifice. We admire, it is true, the "heroes and martyrs of science" and can never fully repay the debt we owe them, but our admiration would be more complete if they had themselves collected the debt and drawn less upon our pity.

But if the results of scientific work are too precarious to be depended on for a livelihood, need it therefore be abandoned altogether? Are there not incidental advantages to be derived from such work which are worth considering.

The indirect and incidental results of our actions are by no means unimportant. In this direction it seems to me the advantages of scientific work are more apparent. It is an undeniable fact, for example, that teachers of moderate acquirements who have done some useful original work can more readily secure positions of profit than those of

greater general ability who have done no such work. Progressive work is prized by everyone in any profession and there is a general desire to see the doer of it rewarded. Besides, the production of a good piece of original work is presumptive evidence of general professional ability, a condition which does not always exist.

Another result of scientific work is its stimulating effect upon one's whole professional life. To use a botanical illustration, original work is the meristem of one's education. It maintains the life and integrity of the whole fabric. It keeps one's methods from becoming dead and formal, and permits one to adapt himself to new conditions. In other words, it is a golden thread which carries the feeling of youth into old age and helps to always understand and teach the young. Personal work also, while a source of honest pride, never leads us to despise the work of others, as mere learning sometimes does; but enables us to appreciate its true value.

To every educated person I would therefore say, make some useful contribution to your profession. If possible have constantly before you some piece of original work to which your spare time and attention shall be devoted. Do not undertake too much, and do not let it divert you from the routine duties of your business or profession. Be content with small progress so long as it is genuine. Do this and you will find it a source of pride and satisfaction throughout your life, and possibly a source of profit besides. Your general reading and study will have a freshness it would not otherwise have as it serves to illuminate from time to time your chosen theme. Old age will then have something upon which to devote its attention when the strength for business has departed, and the declining years of life will not be disfigured as they too often are by enforced idleness or childish trifling.

The subject selected for original work will be likely to be connected with one's

calling or profession, but this is not essential. Many in commercial or manufacturing pursuits have done excellent work in literature or science. There is sometimes an advantage in having a specialty wholly apart from one's daily business, particularly if that employment be somewhat monotonous or confining.

Yes, by all means resolve to do some original or scientific work, in whatever direction your taste leads. Get as good a general education as you can afford, reserving a generous allowance of time for preparation in your chosen calling. Whatever observations and experiments you may then make will be more likely to be of real value. You will not then be content with the mere collection of curiosities, with meaningless observations or the changes of the weather, or be taken up with the whimsical fads of society.

In conclusion I cannot do better than to call attention to some of the conditions required for successful scientific work which, if they were more generally borne in mind, would cause such work to be better appreciated and would prevent some of the disappointments and failures which too often follow scientific efforts. From necessity, original or scientific work cannot proceed in the orderly manner of a well established business whose methods have been gradually perfected by long experience—more than ordinary precaution, therefore, is always necessary to insure success. The world is full of experiments, yet how seldom do they end in demonstration. The desire to experiment in some direction or other, amounts to an almost universal passion. In fact, it is the tendency to undertake experiments from pure impulse which leads to so many failures. One who will make his business investments with the utmost care and deliberation will enter upon an experiment with hardly a thought of the conditions required for success and with no thought at all as to whether some other subject for investigation had not better have been chosen.

It need not be said that suitable questions for investigation are too numerous to be selected at random. Curiosity and enthusiasm, however, are the foundation traits of the successful experimenter; the first, bringing fresh topics for study perpetually to mind, and the second, carrying one over repeated failures without discouragement. If to these is added an everlasting grip that never lets go its object, one may hope to do something for science.

Looking Further Forward.

A. C. BURNHAM, OLYMPIC SOCIETY.

But a few years since, the reading people of the United States were changed from comparative quiet to a tumult over the ideas presented in "Looking Backward," a book written by Edward Bellamy. It was read by many. Many thought it described a state of society much to be desired. Some few, however, thought deeper upon the subject and were not in such a hurry to accept what at first sight appeared so plausible. We can account for the great but short-lived popularity of the book in two ways. First, it was highly embellished with flowery language, and therefore pleasing to any reader. Second, little or no thought was given to the real foundations or principles of the book, but it was accepted without question, and was said to be a good book.

But when we lay aside the novelty of it and the beauty of Mr. Bellamy's style, and consider the purpose for which the book was intended and the principles it presents, it assumes altogether a different aspect. It is true people have long lives, only a comparatively short portion of which is spent in hard labor; they are always sure of plenty to eat and a good place to sleep. But who that is honest and industrious has not fully as much assured to him in the present day? And besides, there are many chances for corruption, disorder, abuse and discontent, of which Mr. Bellamy does not speak. He

does not refute a single argument that might be raised in the mind of a reader, and therefore leaves the careful reader in much doubt as to the adaptability of his scheme.

Now, the broadest man is always the most respected; the man who knows thoroughly both sides of a question is always listened to with the most interest; the man who knows best what arguments will be set forth by his opponent is the most successful debater; and no man is properly qualified to decide upon a question until he is thoroughly acquainted with every phase of that question. It therefore becomes necessary to study carefully, and fully refute, all arguments against a measure before it can properly be said to be positively desirable.

In considering "Looking Backward," Mr. Richard Michaelis has presented many good arguments against Mr. Bellamy's theory. Mr. Michaelis has easily shown, in a book entitled "Looking Further Forward," that Mr. Bellamy's life in the twentieth century may have, at least, a much darker phase. Although "Looking Further Forward" lacks the beauty and the pleasing style of "Looking Backward," still it is well worth careful study by all those who drank in without hesitation the ideas of Mr. Bellamy. It is a fact worthy of notice, and one that serves to indicate something of the general character of American readers, that while so many read and absorbed the ideas of Mr. Bellamy, very few, comparatively, have read or even heard of "Looking Further Forward."

All who have read "Looking Backward" will remember how one Mr. West falls asleep in the city of Boston in the year 1887, and awakes in the year 2000 to find himself in the midst of an entirely new state of social and governmental affairs, and in the household of one Dr. Leete, a very influential man in his sphere. They will remember also how Dr. Leete explains to Mr. West that all the labor is performed by an industrial army composed of all able-bodied per-

sons between the ages of eighteen and forty-five years, but does *not* explain how it is that his own daughter, who is between those ages, has nothing to do but go shopping; explains how each person has a credit-card good for the *same* amount each year, but does *not* show how he and other influential men can live in fine houses and give handsome parties, while some are cuffed around by overbearing foremen and sleep in poor boarding houses. In fact, although Dr. Leete talks incessantly of the "best state of society that ever existed," he does not explain why the farming people, and all people outside of cities, are so poor; why all clerkships and positions, where the labor is easy and the hours are short, are filled by friends or relatives of the administration, whether or not they are qualified for the positions; why, under such conditions, they have need of politicians (but even denies that they do have them), or why parties in power can be removed only by rebellion.

Mr. Michaelis begins in the same manner with the same man, Mr. West, but has him afterward become professor of the History of the Nineteenth Century in a college supposed to be in Boston. In this capacity Mr. West meets his predecessor in office, one Mr. Forest, who has been removed from his high position for believing and speaking against the administration, and who is now janitor in the college where he was once professor.

From Mr. Forest Mr. West learns many new things regarding the society around him. He learns that there are many politicians; that there is much discontent among the laborers; that, as all positions are obtained by appointment, the high officers appoint under them their friends, those appoint next under them their friends, and these for the next places their friends, and so on, so that all the power is concentrated in a fraternity of relatives and friends. Now, as these officers do the regrading each year, they put in the first two grades (the

members of which can vote) all who are ambitious and unprincipled, while those who object to the system are lowered from one grade to another, and finally made to do the meanest work in the lowest grade. To be sure there is a court of appeals, but in this, cases are decided by one man who holds his office by favoritism, and would be unlikely to decide against a system which affords him so comfortable and easy a post, but would, on the other hand, send the "kicker" back under his old foreman, who would be still less apt to use him better. Yes, there is a congress, but what will it do? Most of its members are elected by voters of the upper and favored class, are unprincipled, and will spare no means to raise themselves above their fellows; and, if any are not, no time is lost in reducing them to the lowest grades. In all this we see the darker side of the society of Bellamy.

In one of their conversations Mr. West asked Mr. Forest if he thought the present state of society to be inferior to that of the nineteenth century. Mr. Forest answered: "Can you entertain any doubts? Look around. Is the leading principle in creation equality or variety? You find sometimes similitude, but never conformity. We may as well try to make every man six feet long, forty-two inches around his breast, with a Grecian nose, blue eyes, light hair and a lyric tenor voice, as to equalize all lives and reduce them to a communistic state."

In Mr. West's first lecture as Professor of the Nineteenth Century History he was very loud in his praise of the new state of society, and was very coldly received by the students. This surprises him at first, but after studying the state of their society personally for some time, and after listening to all the arguments of Mr. Forest, it was plain to him that perhaps there might be a dark side to life in the twentieth century. While he is convinced that there is now more of corruption, abuse and discontent than there was in the nineteenth century, and while he is

debating whether to surrender his high position and work at the lowest, hardest work the rest of his days, or to retain it and be a hypocrite, he awakens from his dream to find himself in his bed and in the nineteenth century, and is pleased that he is again surrounded by our society of to-day and not that of the twentieth century as pictured by Bellamy.

If we add to all the above arguments the fact (which any one who has read "Looking Backward" will admit) that its foundation is communism, we are forced to admit that Bellamy's theory is not adaptable to any state of society that will probably ever exist in the United States; for communism has been tried by nearly every nation on the globe, and was tried by our own in its infancy, and always without success. Moreover, no one will say that such a state of society could exist, even for a day, in the United States at present, and we would dislike to believe that our civilization would ever degenerate until there would be no premium on good workmanship, or until the meanest tramp would be as much respected as the most honest and faithful workman, both being fed, clothed and treated alike, the one at the expense of the other.

The Twentieth Century Novelist—An Ideal.

W. F. WIGHT, HESPERIAN SOCIETY.

We read many wonderful things in books. Men who write them must be in closer communion with nature than most of mankind. That the well-being, the very life of a people depends on its men of genius, few will dispute. Not only at the present time do we find such men, but each century has given to the world men who have wrought marvelous changes in the opinions of their own generation; changes which have been felt through all succeeding generations. We have had our Milton, our Shakespeare, our Carlye, and our Hawthorne. These men are

no longer with us. True we have their works, their thoughts, yet there is room for the new prophet. How much broader the field now than when Shakespeare wrote his plays, or even when Carlye wrote his "French Revolution," and Hawthorne his "Scarlet Letter." These works are master-pieces, still they do not tell us of what we most need. The twentieth century needs some one to tell of the ideal life we have strayed from.

Let us now see who can best tell us of this life. Will it be the essayist with his deep philosophy, the poet with his language of the idealist, or will it be the novelist with his great moral lessons and pictures of nature. We believe it will be the novelist.

As the world progresses and times change, the man of insight adapts himself to the changed conditions, so the novelist of the future cannot be like that of the past. The novelist we will consider has never existed. He is an ideal that the twentieth century may and should hope to realize. And since we believe it is the novelist who is to guide us, suppose we look carefully at the man, see if there is any truth in our faith.

What is a novelist? Webster says "A writer of fiction." True, but is he not more than that? Is he not a reader of men, of nature, of unseen things? The novelist of the nineteenth century is working on the verge of the poet's field. He is working into that field more and more each year, and by the time the twentieth century shall have dawned upon us he will be hand in hand with the poet in the exposition of the unknown and the unseen.

The novelist sees more at every step than common persons. He watches the sun rise; and in the evening he sees that same orb go down among the hills in the west, casting its last rays on the clouds far overhead, coloring them in yellow and gold. He looks at the stars, and, as he gazes one of those twinkling orbs suddenly falls, leaving for an instant a bright gleam in the heavens, then only a dim vision of something which

once was, but now has fallen, is left the stargazer. He sees in these scenes the evidences of a divine hand, beautiful things unknown to us except as he pictures them on the printed page. Yet while he sees and understands these things he uses them only as a background on which to paint his characters.

I say he is a reader of men. More than that he looks into the very hearts of men and sees in them the divine element, shows us how of all things great we are the greatest.

We have need of the novelist to lift us out of the mire of this money-making world into a higher plane of thought, one which we do not often reach. Humanity to day is covered with a veneer, a sort of varnish that covers up the inner self. The novelist pierces through this, and he himself has it to a less extent than his fellow beings. As Carlyle has said of the prophet, so may we say of the novelist, who in truth is a sort of prophet. He said: "The great fact of existence is great to him. Fly as he will he cannot get out of the awful presence of his reality. Fearful and wonderful, real as Life, real as Death, is this universe to him. Though all men should walk in a vain show he cannot."

The novelist is a man who cannot forget the ideal life. The fashions and formalities of the world do not affect him, he moves in too high a plane for these, and can look down upon them, reproduce them in his books, thus giving us the advantage of a mirror in which we see our actions, and a phonograph which repeats our conversations. We read his works and perhaps each of us thinks, how is it that some one of his characters so much resembles me? The novelist has that faculty of presenting a character in such a way that each sees some characteristic of himself reflected there. And right here comes a part of the work of the novelist. It is not altogether in teaching men to do right, but in showing men their

faults and letting them choose for themselves. Some will say that this is the sole purpose of the novelist, others that it is rather to teach men to live aright, but that depends largely upon the individual writer. We have good works in both classes. It is plainly seen that in the first instance he has simply to present the character to our view, while in the latter he must take everything into consideration and determine which is right and which is wrong, and how is he to do this? Is he to take right and wrong; calculate the profit and loss, ultimate gain of the one and loss of the other; and summing all up into a net result, ask you whether on the whole the right is not considerably in excess? No, the one must in no wise be done, the other in no wise left undone. You shall not measure them; the one is death eternal to a man, the other is life eternal.

It is a difficult thing to do, this saying what is right and what is wrong. Far the larger number of novelists leave us to decide for ourselves. Both have a great work; both are of inestimable value. But which is of the greater value we do not know. Wherever we find the novelist, we see a man who is working with all the energies which he can call into play for the good of humanity.

It has been many years since we have had a novelist whom we might call great. So the time for this new prophet to reveal himself is near at hand.

The twentieth century will have great need of him; and in that century, as yet unborn, our ideal may be realized.

This be my wish: let my lines
Across the pages run like vines;
The words, their shining blossoms be,
The book a field of melody.

F. D. Sherman.

If I were as rich as my right hand neighbor, I should have his faults; if I were as poor as my left hand neighbor, I should have his. Being myself, I have mine.

Michigan State Fair.

The Michigan State Fair will be held at Lansing, September 12 to 16. The coming exhibition promises to be up to the usual standard of the fairs held by this society. This is, strictly speaking, the "people's fair." Any person may become a member and have a voice in its management. All moneys received are returned to the people in the way of prizes, except what is needed for actual expenses. The exhibit combines every feature of industrial interest found in the state, and visitors find matters of interest everywhere; good order always prevails, and no objectionable shows are found on the grounds. The railroads carry at reduced rates, and our readers who visit the fair this year will find themselves well paid for the small expense incurred.

Notes.

The Master said "The poor ye have always with you." Probably he meant not the poor in purse, but rather the poor in purpose, will, determination, "spirit." The great part of the students this fall are here for work, and are taking hold of work in good fashion. But unfortunately we have with us a few of the sort who were "poor" before they came,—poor in conduct, poor in work, poor in scholarship. Probably they were sent here because their fathers couldn't manage them at home. They will stay here for a little while, blind to all their opportunities, then they will drop out of school and drop into the great army of incompetents. "O, the pity of it."

* * *

The extent to which the college library has improved during the past two years is most encouraging. It is becoming in all departments a good working collection, and is being used more and more by students and professors. What it now needs is a good and complete index catalogue. In many cases, shelves full of books containing most

valuable material are almost useless because there is no index. The board and the faculty have been doing so much for the library that there is reason to expect the index before long.

* * *

The timely rains throughout the season have kept the lawns in beautiful green. The walks and drives have been well cared for, hence the large campus has been more than usually attractive. As a rule all take pains not to litter the lawns with paper and other rubbish; but occasionally some fellow, forgetful of good training, scatters unsightly material along the walks, or some picnic party shows its appreciation of college hospitality by throwing the refuse of its dinner over a wide area. Well, the Lord having made such people it is probable he has done it for some good purpose, but it is sometimes difficult for us to discern what the good purpose is. O. C.

SCIENTIFIC.

Smut on Wheat and Oats.

A series of investigations, under the management of Prof. P. G. Holden, have recently been conducted in the farm department, in regard to remedies for smut on wheat and oats. These results will soon be published in bulletin form, a summary of which may be interesting to the readers of the scientific department.

1. The loss to Michigan this year in the oat crops alone, caused by smut, will exceed \$1,000,000. This is a low estimate.
2. The smut of oats, and the stinking smut of wheat, are parasitic plants.
3. The spores of these smuts attach themselves to the kernels of oats or wheat, and are sown with them.
4. The spores germinate at about the same time the seed germinates, and in some way enters the young plant and lives upon it, until finally the head of smut appears.
5. Both of these smuts can be entirely

prevented at a slight expense by the Jensen or Hot Water Treatment.

The apparatus for this method of treatment is very simple. A post should be set in the ground so as to stand 4 or 5 feet high. To one side of this, three kettles are placed, so as to form an arc of a circle, the center of which is the post. In kettle No. 1 is warm water; in kettle No. 2, the water is kept constantly at a temperature of 135 or 140 degrees F.; and in kettle No. 3 there is cold water. A pole, long enough to extend from the center post to a foot or two beyond the kettle is fastened by one end to the post. To this pole is attached a sack in which is placed the grain to be treated. It is first dipped into kettle No. 1 to raise it to near the desired temperature, thus avoiding unnecessary cooling of the water in kettle No. 2. It is then dipped in Nos. 2, and 3, as follows: For wheat, the temperature of the water in kettle No. 2, should be 134 or 135 degrees F. when the seed is put in. The seed should be taken out in ten minutes, if the temperature does not fall below 133 degrees. If below 133 degrees it should be left in fifteen minutes, or even a little longer if the temperature should fall below 130 degrees. For oats, the temperature of the water in kettle No. 2 should be 139 or 140 degrees when the seed is put in. It should be taken out in ten minutes if the temperature is not below 135 degrees; if below 135 degrees it should be left in fifteen minutes, or even a little longer if the temperature fall below 130 degrees; during treatment, see that the temperature does not rise above 135 degrees; for wheat, and 140 degrees for oats.

It has been found that this treatment not only removes the smut from the crop, but improves the growth and increases the yield.

It should seem, from present indications, that the farm department of this College will make a very creditable showing at the Chicago Exposition, in more than one line

of exhibits. Their collection of samples of wool is growing rapidly. They recently received two hundred and fifty samples of wool, which include all the samples used in the United States custom houses in grading wool for levying duties, and which is supposed to be a complete collection of foreign wools. It will be remembered that last winter the farm department also came into possession of nearly a hundred samples of Australian wools, which were prepared by the Institute of Technology of Australia, in exchange for a similar collection of American wool. The farm department now possesses the most complete collection of wools in America.

Chemical Analysis and Honey Adulteration.

It is well known that sucrose or cane sugar is chemically distinct from glucose; that unlike glucose it will not reduce the copper salts, and has a strong right-handed rotation. The nectar of flowers is largely cane sugar.

Commercial glucose reduces the copper salts and because of the presence of dextrose gives a right-handed rotation.

Invert sugar—cane sugar that has been reduced by heating with an acid—is left-handed in its rotation. It is usually given as -25 degrees.

Bees gather the cane sugar of nectar and while gathering and passing to the hive they reduce it by digestion, or change it to invert sugar. Thus honey contains from two to eight per cent of sucrose, sixty to seventy-five per cent of reducing sugar levulose and dextrose, and gives a left-handed rotation rarely higher than -20 degrees.

As bees digest the nectar of flowers, we would suppose that honey gathered very rapidly would be less perfectly digested, as it would be a shorter time in the digestive canal and so would contain more sucrose, and less reducing sugar. As bees gather sweets from

such varied sources, widely different flowers, sap and secretions from various insects, we would suppose that the honey might vary not a little.

Thus I have long wondered if the formulæ depended upon by our chemists for honey analysis, were entirely reliable, and sufficient to always determine the genuine from the adulterated.

To determine this point, I recently sent over fifty samples to three of our ablest chemists, viz.: Dr. R. C. Kedzie, Prof. H. W. Wyley, government chemist, and Prof. M. A. Scovell of Kentucky. I have preliminary reports which are exceedingly interesting.

The samples which I sent were simply numbered. There were honeys from all our noted honey plants, several samples of honey dew, honey stored rapidly from pure cane syrup fed to the bees, and mixtures of honey and glucose.

The samples of honey adulterated with glucose were detected, but with them was classed a sample of honey dew which our bees gathered from bark lice, and which was rank and entirely unmarketable. Two other samples of honey dew were pronounced genuine honey. One of these was from *Cynip* infested oak acorns, and the other from a *Lachnus* on the larch. Both were pleasant to the taste.

The samples of honey from cane sugar syrup, one extracted the next day after it was stored and the other not till it was capped, were both detected. But with them were classed genuine honey from basswood, white clover, both were very fine, and one from horse mint, all very rapidly gathered. Thus my opinion, often expressed to my students, that our chemists could not distinguish genuine honey which was rapidly gathered from that secured by feeding cane syrup, is fully sustained.

Three samples, one white clover, one golden rod, and one white sage, all very rapidly gathered by the bees, gave such a

high left-handed rotation that there was a suspicion of adulteration, with invert sugar. Yet these were all genuine honey of superior excellence.

Three other samples, one from black mangrove, one from an unknown source, stored in Louisiana, and which never granulated, and one from horse mint, the latter gathered very rapidly, deported themselves exactly as would invert sugar.

Thus we see, that while the chemists can detect adulteration, even with one-third or one-fourth glucose, they could not distinguish honey from flowers, from that secured by feeding bees pure cane sugar syrup. That while they can now detect adulteration by use of commercial glucose, that most if not always used, they can not by use of present methods, detect honey produced by feeding bees wholly or in part on cane sugar syrup.

A. J. COOK.

When musing on companions gone,
We doubly feel ourselves alone,
Something, my friend, we yet may gain;
There is a pleasure in this pain.

—Scott.

All social schemes, like embryo plants, lie
In the vast evolution of the world,
Beneath its mighty heart, whose thunder throbs
Are the world-shaking centuries. Let them grow,
Unfolding slowly, ripening to their hour.
To force them to their birth is certain death,
But nourish the great mother with the wine
Pressed from the fruit of ripe experience;
Make her blood rich with wisdom, let the sun
Of science shine upon her, let her breathe
The calm pure air of reason, till at last
Unimportuned she will present the world
With its sublimest social dreams.

—Lilian Blanche Fearing.

You have no heart? Ah, when the Genoese
Before Spain's monarchs his great voyage planned,
Small faith had they in worlds beyond the seas—
And *your* Columbus yet may come to land.

—Samuel R. Elliott.

As it is man's place to ask, so it is woman's place to wait to be asked; yet oftentimes she has a way of asking why she is kept waiting.

We never get what we want just as we want it.

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AGRICULTURAL COLLEGE, SEPT. 10, 1892.

SUBSCRIBE FOR THE SPECULUM. We would advise all new students to subscribe for THE SPECULUM. This is the students' paper, and gives the students' side of all important matters. The financial part of the paper is quite important, and the larger the income the better paper can we give.

OUR new term starts out with 241 students on hand ready for good solid work. The new class was not as large as we were in hopes it would be, but perhaps the lack in quantity is made up in quality. How strange it seems to say "class of '96," but such is the title by which the new class is known. There has been one thing quite noticeable in the last two or three classes, and is more so in this class—that is, the number who enter the mechanical course. Out of seventy-five students who entered there are forty in that course. This would not be worthy of mention were it not for the fact that after a year or two so many find they have chosen wrong and come over to the other course. In the

past it has looked as though there was not careful enough study given to the two courses before entrance. We hope the present class gave this matter careful attention and that there will be no more changing of courses after once well started in either course.

THERE was the usual disorder in changing of rooms and getting settled at the opening of the term. The faculty laid aside the usual custom of giving us Tuesday afternoon to finish settling and get straightened around ready for duty. They opened their hearts a little wider and gave us all day Saturday. This met with general approval as the students are not in sympathy with Saturday recitations. This also gave a chance for those who were behind in their course to get even, as that was a day of special examinations in all departments.

THOSE subscribers who change their address should be sure to notify us of their change if they wish the usual monthly visit of THE SPECULUM. Many letters come to this office complaining that they have not received such and such issues. When the matter is looked up we find their address has been changed and we are not notified. We will not in any way be responsible for your not receiving the papers when your address is changed and we are not notified. Even though your name appears in the personal column, you should promptly notify us of the change, that it may be properly entered on our books.

SINCE the class of '92 took their degree of B. S., and passed out into the active arena of life, a few questions have arisen in the minds of the under-classmen. Principal among these is the granting of degrees to the so-called summer students. These are students who have taught for some time and who come here to review some study or studies. Nearly every class has the name of one or two of these summer students, who are

granted the regular degree. This does not seem right to us. These students do not do one iota of manual labor when here, and are never called on for drill. We who enter have to put in our regular time in drill and manual labor, and should we be absent a term are required to make up the work. Why should these summer students be privileged characters and be granted a degree for less work and of less requirements than the regular students? If our manual labor and military drill is an essential part of our education while here, then have the same requirements for all. If it is not essential, then why not drop it from the curriculum? Which shall it be?

THERE is one feature of our College life that is growing constantly, and this one is working much harm to the students as a body. I refer to the so called society politics. As we are now situated, every phase of our college work is encircled and surmounted by society. I would not for a moment think of abandoning the societies, or even recommend one to stay out of society. Far from it. Our societies have already done too much for the general welfare of the students; but when we carry our society politics into every part of our government as students, it is then time to call a halt. For example, two men come before the students as candidates for some office. One is well qualified for the office, but is a member of a society then in the minority. The other, not so well qualified, perhaps quite deficient as a student, is a member of a society that is in the majority. Who receives the election? The poor student who is a member of the stronger society. Ought such things to exist? Can we afford to sacrifice a good man for an office just simply to farther society interests? When we allow the society politics to take hold of us in drill, in boarding clubs, in our class elections, then is that part lowered just so much. How then, you ask, shall we get around the difficulty?

Let us be careful of the men whom we nominate, and if there is a good man nominated let us give him our support, and vote for man and not for society. When this is brought about there will be an era of good feeling among all literary societies.

FOR two terms now the Club Boarding Association has been a corporate body. Thus far we can see a benefit from such an organization, or rather reorganization. The putting of the clubs in one corporate body has given the boys as good board as they have had in the past and there is a steady decrease in the price. There is no longer the cry of money, but it is strictly understood that the deposit spoken of in the constitution must be forthcoming if they desire the advantage of club board. Merchants are not afraid to deal with us now. Needful materials can be bought in large quantities and paid for when bought. There is a good check upon the steward. If he is not performing his duty, the auditing committee can take steps to set him aright or have him removed. The very letter of the constitution is lived up to, so we would advise all who are not familiar with the constitution to give it a good study. Here was the failing point of the old constitution, it was not lived up to. One point after another was broken or dropped until at last there was no way by which the steward could secure the price of board from the students, should they fall behind. Now all is changed. The advance is made, debts do not accumulate, but good board and decreasing price is the result.

Dead, silent, nature stands before our eyes,
We question her in vain,
And bootless strive to gain
Her confidence; she vouchsafes no reply.

—W. P. Foster.

Earth has her hurts but seems to lack
Her cures; the broken heart
Knits in its cleavage, and the back,
Though lashed, forgets to smart.

—J. J. Chapman.

COLLEGE NEWS.

Commencement exercises passed off smoothly.

Prof. Harwood and Prof. Taft visited the Detroit Exposition.

There are now two hundred and forty-one students classified this term.

The occupants of Howard Terrace took a one day's outing at Pine Lake, Aug. 20.

Mrs. Edwards and two sons, who have been making a visit in Virginia, just returned.

The post office has a new filing case, and is also being wired for new counter lamps.

The last year's seniors enjoyed a reception given them by Prof. Pattengill, Aug. 11.

The Y. M. C. A. has published a new hand-book, which is now ready for distribution.

Among other exhibits at the State Fair by the college there will be a collection of our common weeds

Memoirs of Torre Botanical Club and three German mathematical books have been lately added to our library.

The Farm Department has a new Ohio ensilage cutter with which they intend to increase the capacity for cutting ensilage.

Professor Cook spent his summer vacation in visiting the iron and copper mines of the Upper Peninsula, also the Mining School.

Lieut. Lewis and Maj. Estabrook visited the State encampment. They speak highly of the treatment they received from the boys.

Governor Winans reviewed the cadets of M. A. C. Aug. 11, and complimented Lieutenant Lewis highly on the manner of the boys' conduct.

The wax fruit models, that are being made by Mrs. Palmer at South Haven, are partly completed and are, to look at them, the nearest representation we ever saw.

During the tremendous thunderstorm, Aug. 3d, lightning struck the south cupola of the sheep barn and shattered it somewhat. No further damage however.

Professor Wheeler is in the Northern Peninsula and Wisconsin, making collections for the World's Fair. The Botanical Department has just received his first installment, consisting of thirty specimens.

President Clute and Professor Taft recently visited the Experiment Station at South Haven. They found things in a good condition but rather dry. The young peaches are a failure as to crop and the grapes are rather late.

Since the last issue of the SPECULUM, Professor Corbin has resigned, and Professor MacBride, a graduate of the University, has been selected to fill his place. Professor MacBride is here and seems to be giving good satisfaction.

The officers of the Students' Organization are:

President, D. J. Crosby; vice president, A. C. Burnham; secretary, W. C. Bagley. The legal board consists of A. T. Stevens, A. B. Chase, L. H. Baker, E. N. Thayer and J. W. Perrigo.

The officers of the Club Boarding Association are: President, Wendell Paddock; vice president, A. T. Stevens; secretary, A. B. Chase; steward of A, W. L. Harvey; of B, R. S. Welsh; of C, J. B. Dimick; of D, O. H. Pagelson; of E, J. T. Wight.

Professor Kedzie has received thirty-eight varieties of wheat from Professor Shelton of Australia. There are some very beautiful specimens. One was very interesting as it contained many weevils. Professor Kedzie found them before any escaped and has them now so there is no danger of escape.

Dr. Beal, Prof. Burnett, Prof. Breckenridge, Mr. Gladden, Dr. Kedzie, Mrs. Nellie and Ella Kedzie attended the American Association for the Advancement of Science at Rochester, vacation week and Dr. Kedzie went from there to Washington to attend a meeting of chemists. They have all returned.

The material of the old greenhouse that could be used has been built into a cold grapery. It is located in the bank, south of the greenhouse, is of the same dimensions and structure as was the south wing of the old greenhouse. It is to be used for carrying through half hardy plants, then in spring for starting bedding plants.

A bulletin, by the college is just out, on the Jensen hot water treatment of smut on oats and corn. This will be very valuable as it seems to be a practical remedy to prevent this fungus growth that tends to destroy a larger per cent of our crops than most farmers are aware. An extract of the bulletin will be found in another department.

A college committee conferred with Secretary Butterfield in regard to a space at the State Fair where the college might mass their whole exhibit except live stock. They have been granted the south seventy-six feet of the Machinery Hall, and all departments and all departments will exhibit with persons present to explain the articles of exhibit.

The new greenhouse is finished. It may be of interest to those who look back over the campus from a distance to know something about it. It is divided into four houses, the largest of which is the north portion extending east and west and has a width of twenty-five feet, and length of fifty-seven feet. The south wing which is sixty-seven and one-half feet long, has the other three houses in it.

New steps have been placed at the west entrance to Wells Hall, also at the south entrance of the middle ward of the same hall. At the same time these were built, the steps at the south entrance of the west ward were torn away and a porch erected in its place. This made it very inconvenient for those in this ward and the boys removed it. While this may look like hastiness in the boys it was their last resort, as it seems a petition to prevent the change had no effect.

The Entomological Department has just received one hundred teneid moths from Miss May E. Murtfeldt of Missouri. These are of great value as they show all stages of development of these moths, the largest of which is only about the size of the finger nail. They also have a very large locust from Alabama and a larva of the regal walnut moth, which is four inches long and has a number of very large horns about the head. It is familiarly known in the South as the horned devil.

The college procured over 300 pounds of seed supposed to be dwarf essex rape seed. Since sowing and growing it they have found that it is not this but only bird rape. This is worthless for forage or any other use, and the college is very much disappointed, as also will be the farmers to whom they have sent this seed. They took all precaution necessary in getting the seed and thought it was all right, as it originally came from the Carters in England. Who is to blame is not known but some one has certainly been very thoughtless.

The Farm Department has about 350 samples of wheat they are growing. They are making a collection to exhibit at the World's Fair, also at the State Fair. Besides this, they will describe those grown, and publish the description in a book with plates representing the wheat. The description is to be made by Professor Beal, the other work by the Agricultural Department. This is to be distributed and will be of great value to the farmers if they will obtain one, as many samples of so called new wheats sold at high prices are probably only old varieties under new names. How long before this will be ready we cannot say.

During vacation the chapel was wired with twenty-eight, fifty volt incandescent lamps. This is on a two hundred volt circuit. They are arranged in a rectangle, the same as the decorations and give a very harmonizing effect. The old lamps have been removed from the posts altogether, the chapel looks very much improved. There are two dynamos now in the Physical Laboratory, one Brush and a Vande-pole. The latter is used to light the chapel, and will light ten or fifteen lamps for any special decoration. When the armory is used, both machines will be used. Just before commencement, new steel electroliers were put in the corridors of the library building, and later in Professor Edwards's office. It is probable that another dynamo will be necessary at the engine house, if both shop and library are to be lighted at the same time.

The whole structure is built on a substantial, hollow brick wall which rises two and one half feet above ground. The north or Palma house has side walls of glass that are six and one half feet high, and the full height to peak is thirteen feet. The north house of the south wing is twenty-five feet long and twenty-five feet wide with side walls two and one half feet high. This is to be used as a store house for tropical plants. The center house is the same in dimensions and is

to be used for cacti. The south house which is twenty five by seventeen with the same height as the others is to be used as a rose house. The whole house is under a span roof and has sills, rafters, purlines, and ridge of iron. The palm house has the large palms, oranges, bananas, etc., planted in the center, then around the side are the tables which are supported by legs of gas pipe and top of angle and T iron. This is covered by slabs of slate that reach the entire width of the table making a top that can be washed at any time. The table of the other houses are similar only they have smaller slabs of slate for covering. This is much ahead of the old house and will give the old boys much pleasure to visit it.

One year ago Professor Cook delivered the annual address to the Mason County Agricultural Society. He has been engaged to do likewise this year. Professor Cook says this is one of the fairs of the State that does not have horse trotting and is successful.

The officers of the literary societies for this term are, Union Literary—President, R. B. Pickett; vice president, D. D. McArthur; secretary, R. C. Fisher; treasurer, W. J. Goodenough. Eclectic Society—President, A. T. Stevens; vice president, F. P. Clark; secretary, L. A. Wilson; treasurer, A. J. Beese. Olympic—President, W. Paddock; vice president, G. E. Simmons; secretary, H. E. Ward; treasurer, V. V. Newell. Hesperian—President, J. T. Wight; vice president, H. M. Goss; secretary, H. F. Lake; treasurer, R. S. Welsh. Feronian—President, Miss Cora Stocking; vice president, Miss Fay Wheeler; secretary, Miss Katherine Cook. Columbian Literary—President, J. G. Veldhenis; vice president, P. W. Ross; secretary, J. B. Dodge. Of the fraternities the officers are, for the Phi Delta Theta—President, C. W. Leipprandt; vice president, W. C. Bagley; secretary, J. C. Patrick; of the Delta Tau Delta—President, J. W. Perrigo; secretary, W. F. Bernart; treasurer, R. A. Bentley.

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.

The following clipped from *The Madison Times*, Wisconsin, is inserted without comment—

GOES TO ANOTHER FIELD.

With this issue Prof. E. J. MacEwan will cease his duties as editor of *The Times*, with position he kindly consented to fill temporarily. The gentleman leaves in two weeks for Logan, Utah, to begin his work as Professor of Modern Languages in the University of Utah. *The Times* acknowledges its indebtedness to Professor MacEwan for the able, dignified and energetic manner in which he has entered into his

work as editor, believing that his course and policy have done much toward assisting the paper to a stronghold in the friendship of the people. It would be pleased to retain him upon the staff, but a prior engagement in his life profession rendered this impossible and therefore it only remains to acknowledge the value of his services and bid him Godspeed. He is worthy every success that can come to the lot of man and we believe the people of the city, without regard to creed, join in this sentiment.

'61.

Albert N. Prentiss, professor of botany at Cornell University, made the college a visit during the first week of this term, a guest of his former room-mate, Professor Cook. In the course of his remarks to the boys at chapel, Professor Prentiss said that he had not visited the college before in twenty-four years, and was both surprised and pleased to see the rapid improvement the college had undergone in that time.

WITH '61.

W. W. Bowdish, for two years a student with the first class that ever entered M. A. C., visited the college, August 30th, the first time since he left, over thirty years ago. Mr. Bowdish is now an enterprising farmer in Washtenaw County.

'64.

Lewis Vanderbilt has been spending the past summer cultivating his farm near Pittville, California, where he has been enjoying the best of health. He still does surveying, and laying out irrigating ditches. Politically, he seems to be drifting away from the G. O. P.

'68.

John Swift, a farmer of Harbor Springs, was present at the Bay View Farmers' Day, held August 22d, as were many other M. A. C. men. Mr. Swift has a son in the Mechanical Department.

'70.

One of the best nominating speeches made at the recent Republican State Convention, was made by Geo. A. Farr, nominating G. J. Diekema for attorney general.

Considerable talk is going the rounds of the college inhabitants concerning the welfare of our State board representative, Mr. Charles W. Garfield, who has gone abroad, also Secretary H. G. Reynolds and son, Fred L. on account of their nearness to the cholera infected districts.

'71.

Prof. E. M. Sheldon cheers us in our work by the following letter: "I have now been in the service of the Queensland government as instructor in agriculture, two and a half of the three years for which my original engagement was made. I enjoy the work, and like the country and its people. Have had plenty to do, but have had with it my full share of appreciation and pay of the more substantial sort. My business consists chiefly in lecturing, reporting on all sorts of matters connected with agriculture, and advising the government in its

efforts to establish farming in the colony. During the past year I have travelled something over 10,000 miles on various errands. There are six children now—five girls and one boy. One is a 'banana girl.' Our ministry have unanimously, I am told, asked me to consider myself a permanent officer of the government at my present salary and allowances, amounting to \$4,500, or to renew my present engagement in its expectation, for a term of years. So we are likely to remain among the Antipodes for some time."

'73.

Geo. C. Nevens was president of the Allegan County Republican Nominating Convention.

WITH '73.

Frank Wells visited the college a few days since, and presented the Zoological Department with a large collection of butterflies taken from Southern Ohio.

'75.

O. E. Angstman has recently erected a handsome residence on Putman avenue, Detroit. Among his near neighbors are his classmate and law contemporary, W. L. Carpenter, and Frank Robson of '78.

Geo. A. Royce, revenue collector at Marquette, made a very telling speech at the recent Republican State Convention, in behalf of the Upper Peninsula candidates for office.

'77.

Albert Dodge is the prohibition candidate for governor. E. L. Brewer, for two years with '76, is on that ticket for lieutenant governor, while George Malone, also a former college man runs for secretary of State. Undoubtedly the old college will go "dry" in November.

Wm. C. Latta, professor of Agriculture, Purdue University, visited Rochester at the recent meeting at the American Association for the Advancement of Science, where he read a paper. He is also leader of the State Farmers' Institute of Indiana.

A B. Peebles reports a very successful year at the Agricultural College of Connecticut, at Storrs. His health has improved, and he is doing well. As the board of control contemplate the erection of new buildings, he recently sent for the college stereopticon views "to show them what an ideal agricultural college should be like."

'78.

E. O. Ladd, of Old Mission, writes that the farmers there have had a very prosperous year, fruit of all kinds being abundant, and other crops fairly good. Mr. Ladd was one of the many M. A. C. men that met at the recent Bay View Farmers' Day.

F. E. Skules surveyed out the new track for the Lansing Driving Club, situated between Lansing and the college. He also made the college a visit during his stay in Lansing. He is to assist Mr. Garfield in the forestry exhibit at the World's Fair.

George E. Breck, proprietor of The Willows, a

farm near Paw Paw, just returned from his third trip to England for Shropshire sheep. He brought with him this time a very large and valuable importation.

'79.

E. J. Rauchfuss recently visited the college, a guest of Prof. F. S. Kedzie. In the October SPECULUM we expect to chronicle the notice of his marriage.

In the June number of *The Irrigation Age*, a California paper, we notice that Prof. L. G. Carpenter, who has made a tour of Italy, France and Spain making a study of irrigation engineering, will have a series of articles in the *Age*. The *Age* speaks in the highest praise of Prof. Carpenter's ability, and quotes him as authority on questions of irrigating in the western country.

'81.

W. R. Hubbert, a successful practitioner in Detroit, is now also proprietor of a drug store on Gratiot avenue.

Herbert Bamber, who has been located at Philadelphia with the U. S. civil engineers for a number of years, has lately been promoted to more congenial work, with headquarters at Washington, D. C.

Chas. W. McCurdy of the Winona, Minnesota, Normal School, was among the number of alumni that visited the Rochester meeting of the American Association for the Advancement of Science.

'82.

Lincoln Avery, a Port Huron lawyer, was married Tuesday, August 23, to a Port Huron lady.

Will E. Hale, an Eaton Rapids farmer, was a delegate to the Republican State Convention at Saginaw.

J. E. Coulter, formerly book-keeper for the Capital Wagon Works at Lansing, is now connected with the felt boot industry of Grand Rapids.

L. H. Bailey presented an article "The Supposed Correlation of Quality in Fruits," at the recent meeting of the American Association for the Advancement of Science, held at Rochester.

WITH '82.

Chas. E. Lawson is now cashier of the People's Savings Bank at Detroit.

'83.

J. H. Smith, principal of the Rogers Park School, Chicago, took the degree of M. S. at the last commencement.

H. W. Baird, who went to Denver not long since, for his health, is reported as considerably improved.

E. F. Law has been admitted to the bar, and is practicing at Port Huron. We hear he is exceptionally successful considering the short time for which he has been practicing.

'84.

Clarence E. Smith, a former superintendent of schools at Schoolcraft, is now a real estate agent at Chicago, where he thoroughly enjoys his new work.

J. D. Hill and Miss Emma Diebly were married Wednesday evening, July 6th, at the residence of the

bride's parents at Montpelier Ohio. "Ben" and his wife took a quiet trip to the East, visited Niagara Falls, New York, Washington, and other points of interest. Mr. Hill is now mayor of the city of Montpelier.

E. C. Bank for some time assistant superintendent of the Michigan Reform School, writes that he is still trying to reform the wayward boys at the Philadelphia House of Refuge. The institution there which was established in 1826 is just moving into a new site at Glen Mills, a suburb 20 miles from Philadelphia. The new institution is built on the "family" or "cottage" plan similar to the Lansing institution, the grounds being surrounded by a stone wall with about thirty feet high with corresponding bars and bolts all through the buildings. They expect to be entirely moved by September 1st.

'85.

L. G. Palmer, principal of schools at Capac, visited the college just before commencement.

The following letter from Kingston, Rhode Island, explains itself:

"A small boy arrived here August 5th, and wishes to present his application for admission as a student of M. A. C. as soon as he can pass the entrance examination. His name is the Jr. of

"Yours truly,
"JAMES DELOSS TOWAR."

G. C. Lawrence, formerly superintendent of the Grand Ledge schools, with his wife, visited the college recently. Mr. Lawrence contemplates taking post-graduate work in botany and horticulture the ensuing year.

'87.

Chas. E. St. John, formerly professor of chemistry at the Michigan Normal, will be a student at Harvard the coming year.

O. C. Wheeler represented his township at the recent Republican County Convention, when he was made a delegate to the Congressional convention.

C. B. Waldron, professor of botany at the Fargo, North Dakota Agricultural College, is reported as having finished a very successful year. The president of that institution says Waldron, McArdle, and Himebaugh seem to be well made men.

'88.

A. A. Abbott is a student at the Mining School at Houghton. He is reported by the president as being one of the best students in the Mining School. Arthur B. Cordley has been investigating the insects of the great Colorado canyon under the auspices of the U. S. Department of Agriculture.

W. M. Munson, professor of horticulture at Orono, Maine, visited the college just previous to commencement, and took the degree of M. S. Prof. Munson was one of the M. A. C. men that read articles at the Rochester meeting of the American Association for the Advancement of Science.

Harry Thurtell has a scheme for uniting the old

boys at the World's Fair which he states as follows: "The W. C. T. U. are building a big hotel that will accommodate several thousands. It is to be only twenty minutes' ride from the grounds, and on the Illinois Central R. R. They are trying to get rooms let in advance, rates \$1.50 per day for rooms with one occupant, or \$2.00 per day if two or four occupants. The former Prohibition candidate, Mills, is secretary of the enterprise, and I propose our sending a circular letter to each of the men of our college, and getting Mills to send one of his circulars, and let every one who wants to, take stock in it. It will concentrate the people there and seems to be as desirable a headquarters as can be found."

Charles H. Redman and Mildred Young were married Saturday, July 16th, at Sangatuck, Mich. At home, 349 North Lafayette Street, Grand Rapids.

'89

Cards are out announcing the marriage of Mr. L. A. Clinton to Miss Florence A. Seage, of Lansing. At home, after October 1, at 113 Chestnut St., Lansing. How about a treat for the "SPEC." board, Clinton?

James W. Toumey has been investigating the Colorado canyon with A. B. Cordley, making a specialty of botany.

H. E. Weed recently visited the college, and went to Rochester with the college delegation.

'90.

E. J. Rowley, a Greenville farmer, visited friends at the college commencement.

William Petrie, for the last year with the Brush Electrical Co., of Cleveland, Ohio, visited friends at the college September 8 and 9. Mr. Petrie will be assistant in mechanics in the University of Tennessee, where J. R. McColl is now professor of the Mechanical Department.

'91.

Alex. F. Gordon, who has been taking post graduate work in botany and German, was granted the degree of M. S. at the recent commencement. Alex is the first one of his class to take an advanced degree.

At the recent regimental encampment at Fremont, Ohio, the company commanded by Capt. F. W. Ashton carried off the honors for proficiency in drill and for marksmanship also. Captain Ashton received many compliments for the fine way in which the company was handled, one of the best being from the Adjutant General, who said: "He is one of the finest appearing captains in the State of Ohio, any company should be proud to have him as a commander."

W. A. Fox is still superintendent of the Noble County Schools, Indiana. We are in receipt of an interesting program of the Noble County Teachers' Association, on which the name of H. R. Pattengill appears as instructor.

William J. Breese and Miss Helen M. Knapp were married at Coldwater, Mich., August 16. Best men

W. J. Graves, with '91, and E. P. Safford, '91. Bridesmaids, Miss Willard of Hillsdale, and Miss Gussie Hillyer, of Grand Rapids. At home 102 Houston Ave., Muskegon.

'92.

Howard B. Baker is taking post graduate work in entomology, B. W. Peet and W. E. Palmer, chemistry, A. H. Gillett, horticulture, while W. D. Grosbeck is assistant secretary.

D. W. Trine succeeds Leo. B. Plummer as assistant in Horticulture at Orono, Maine.

Mabel E. Linkletter and Chas. W. Robinson were recently married.

WITH '92.

L. B. Allison has finished his first year at Annapolis and is spending his vacation at his home in St. Johns. He expects to visit his college friends before returning to Annapolis.

L. W. Watkins visited friends at the college commencement. He was in search of the man who said he went to Colorado for his health, that not being a correct report.

WITH '93.

J. W. Dunn is taking a course in banking at a Grand Rapids business college.

'94.

Cecil J. Barnum has left college for the ensuing year to engage in teaching.

C. S. Goodwin will be principal of the Okemos school for the coming year.

Lavallette O'Neil is working on a ranch near Crookston, Minnesota. He tells even bigger stories of mosquitoes than the *Eagle*.

ATHLETICS.

What a glorious thing it would be for the editor of this department if we could only have a local field day? No more vain search for copy or thin talk about things in general but good, solid, space filling material. Would it not be well to get up one, if only for the athletic editor's benefit? There are many other reasons why a local field day would be a good thing. A year ago we had no running track and facilities for athletics were much more meager than at present. Yet we had then a successful field day at slight expense. We have with us most of the men who made the green the proudest color of all at the last Inter-Collegiate Field day. We have besides a large number of new men. Let a local field day be arranged for and a schedule made of sports and proper handicaps given. Then let our athletes, new and old, prepare for the field day and make it one of the events of the term. The contestants will be benefited by the training and new talent will be given an opportunity to make itself known. But greater than these benefits will be that resulting from the interest in things athletic that must be brought about by this proposed contest. Athletes are not the only requisite for success in a

contest like that of last June; enthusiastic interest and hearty support by all students whether contestants or not—these are the important factors in athletic success.

The student who is not an athlete is too liable to think that if he pays his taxes for the support of athletics, however grudgingly, he has done his whole duty. But this is not so. There is immense moral force in a ringing college yell, and genuine encouragement in a hearty, loyal interest. We should strive to cultivate that interest. Every class game should see all the students as spectators, ready to cheer a good play and encourage their own side. Each student should know what is being done on the athletic field, and even base ball practice should be well attended, that someone besides the manager may know of our needs and possibilities along that line.

The class game between the Juniors and Sophomores, on Sept. 3, was not deservedly well attended. Both teams made errors galore. Had they not the score would not have been as high as seven to eleven, and had not the Sophomore error column been the better filled, the Juniors would not have won, for both pitchers did excellent work. Both teams are good, or would be if they would only practice. As it is now the class teams practice little, and the games are hardly a fair test of their real merit.

The recent action of the Military Department with regard to systematic, gymnastic work is a move in the right direction. This work can be better done by the Military Department than anywhere else, and should tend to make that department more popular and useful.

COLLEGES AND EXCHANGES.

What is here said of the Kansas Agricultural College is equally true of our own institution and should be carefully read:

Every young man who possibly can should attend some one of the good institutions of learning in our State. Nothing else will be such a help to him in coming life. For a poor boy, we believe the State Agricultural College at Manhattan offers the best opportunities. There is no tuition to pay there, and there is more or less work that an active, ambitious boy can do and get paid for by the hour. All branches of learning are taught except the languages. The College is richly endowed by the State, and has fine buildings, printing office, carpenter shop, blacksmith shop, library, laboratory, conservatory, and the farm. A young man can here secure his education, and at the same time learn to do some one thing better than a majority of men can do it. He comes out of the school with hands and mind trained to work, and he is a stronger man every way than when he went in. A boy has these great opportunities offered to him only once in a lifetime. If he lets them slip they are gone for good, and he that might have been a leader in some useful walk of life, may become a plodder, or worse yet an idler, tiresome to himself and useless to others.—*Jewell (Kansas) Republican.*

The University of Minnesota has a new plan of selecting speakers for commencement. A series of orator-

ical contests will be held during the year to ascertain the oratorical merits of the senior class. The ten members standing highest in these contests will represent the class on the commencement stage. Honor men will not appear unless numbered among the ten.—*Ex.*

Volume XXVI, No. 1 of the *Notre Dame Scholastic* is an interesting publication and full of good earnest reading.

Little Miami University is not only proud of her two sons, Benjamin Harrison and Whitelaw Reid, but she adds to her dignity by conferring the degree of LL. D. upon William McKinley, another favorite son.—*Ex.*

A recent calculation shows over three million volumes in American college libraries to-day. Those with over 100,000 are Yale, the University of Pennsylvania, Harvard, Columbia and Cornell.—*Ex.*

Among the noble benefactions made to educational institutions is that of Mr. Edward F. Searles, of New York, who is to present to Bowdoin College a scientific building, the estimated cost of which is \$60,000.—*Ex.*

Marshall Field has given \$100,000 to the University of Chicago on condition that \$1,000,000 be raised within 90 days, and Mrs. Nancy Foster has given \$50,000 to build a woman's hall. Within a month \$118,000 has been obtained for a dormitory for woman students contributed chiefly by members of the Chicago Woman's Club.—*Ex.*

The bright kid who got off the following ought to be worth a million by the time he is 21: Tommy—"Can we play at keeping a store in here, mamma?" Mamma (who has a headache)—"Certainly, but you must be very, very quiet." Tommy—"Well, we'll pretend we don't advertise."—*Ex.*

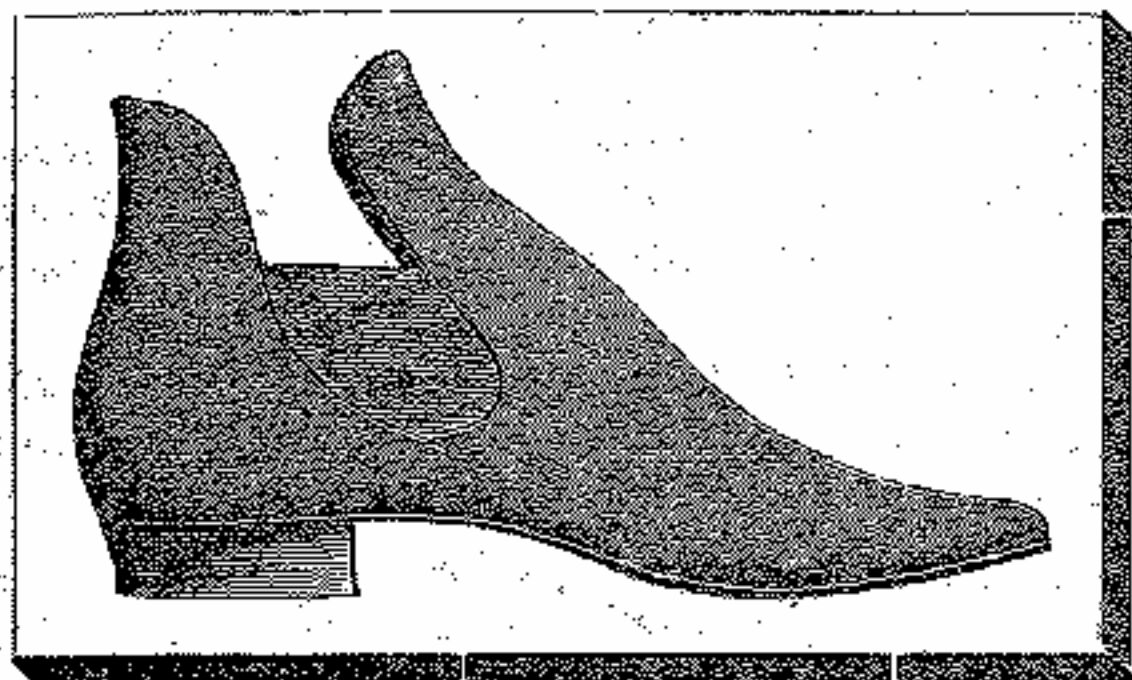
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