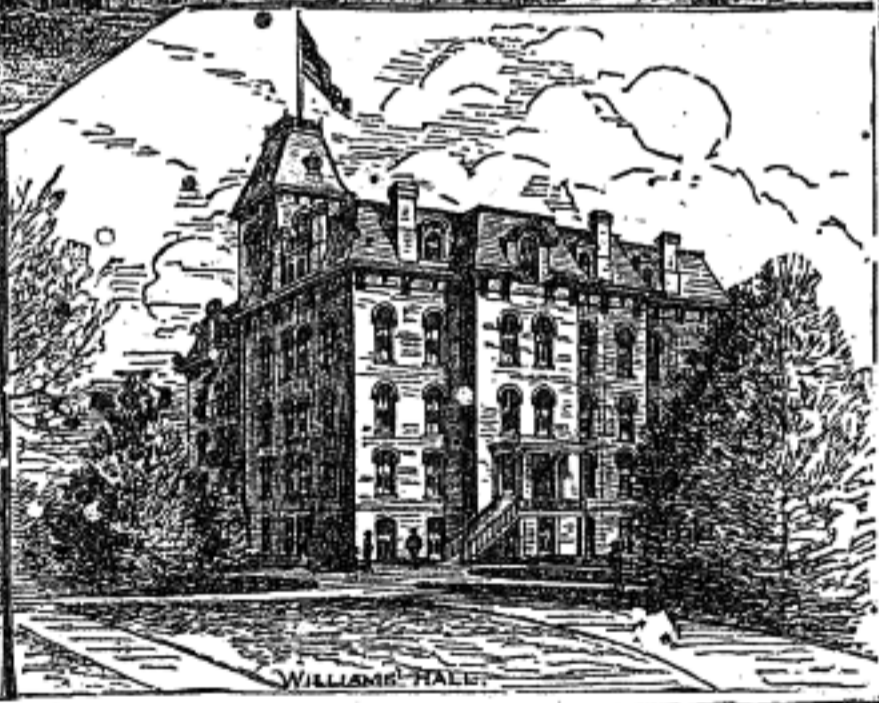


APRIL 10, 1888. *W. A. L.*

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SPECULUM.



AGRICULTURAL COLLEGE, MICH.



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THE COLLEGE SPECULUM.

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Impressions Received from Reading George Eliot's Novels.

R. S. BAKER, PHI DELTA THETA FRATERNITY.

To the lover of fiction there is, perhaps, no author more pleasing in style and more subtle in depicting character than George Eliot. It is a continual source of delight to read the pure descriptions, wise sayings and almost perfect narrative of her works. They make a lasting impression upon the reader, and he is held entranced by their power until the characters have been fully developed, and the web of narrative spun. Then he drops the book with a pang of regret—almost sorrow—to think that so much *reality* has dropped from his life. Yet the impressions have been indelibly traced on his memory, where they will ever after act as a powerful influence in shaping his ideas.

George Eliot's power as a novelist does not lie in any one peculiar characteristic of style. There is an intricate combination of wisdom, descriptive power and philosophy, intermingled with bright flashes of humor and subdued pathos. Many authors have criticised her literary work on account of her rather awkward and heavy attempts at sarcasm. It is true that her heart was too open and her nature too frank to admit of her making a success of irony, and her later works show little of this style. The author who asks her readers, with all the kindness of gentle womanhood, not to grudge poor, stupid Amos Barton his beautiful wife, the "large, fair, gentle Madonna" could hardly be expected to excel in hard, cold sarcasm.

We take up one of her larger works with a feeling of admiration almost amounting to awe. The admiration is the same whether we have previously read any of her books or not, and the old reader has the advantage of being eager to further acquaint himself with the wonderful power of a master hand in the literary art.

The interest of the reader may not at first be fully absorbed on account of the rather lengthy introductions which most of the novels contain. Yet as one character after another is introduced to us the interest deepens. At first we do not know them very well, but, as we note the features and appearance of a newly made friend, so we read here a vivid description of the characters. Then the plot deepens and the narrative becomes intense. We are in a spirit world, with people before us whose motives are like ours, and who are impelled by desires and propensities which we can readily understand. Their very souls are open to us, and

we rejoice and sorrow with them. A trial comes to one of our favorite characters. We unconsciously reason concerning what we should do in a like circumstance and then try to infer what this one will do, but in vain. The author has chosen these circumstances with wonderful genius, and so placed them that they reveal to us in a flash a new characteristic of the character, the existence of which we had never suspected. In this way we get a glimpse into the very minds and thoughts of the characters, who have now become our friends or enemies, as may be. We follow eagerly on, and are not disappointed. A life's ambition is being wrought out before us and our whole nature settles upon its success. Thus it is with the description and the narrative. They impress the characters indelibly on our minds, and lead us upward on the road to culture, and enable us to penetrate more clearly the characters of those around us, and exercise charity for the failings of others.

Yet the character paintings and narratives are not all. George Eliot intermingles with her stories many wise sayings and much very pleasing philosophy. Some critics have contended that these parts hinder the narrative by making it heavy; yet when we look back after reading the work we can see no part that should have been left out. This philosophy seems to harmonize the other parts of the production, and bring forth a more perfect whole. Indeed, to many readers these sayings are among the choicest parts of all of George Eliot's writings.

We appreciate the beauty of style of these novels more and more by re-reading many times, and the depth to which the characters may be developed in our own minds is something wonderful. In fact, as a cultivating and enlightening influence, there are perhaps no literary works in the English language more valuable than George Eliot's novels.

Longfellow and His Works.

F. H. HALL, UNION LITERARY SOCIETY.

The tendency toward transcendentalism which marks much of the poetry of recent years has influenced many of the critics to assume a severer tone toward Longfellow. They attempt a disparagement of his work because of its simplicity, its lack of that deep, obscure study of motives which is the chief feature of the transcendental school, and the absence of marked originality in character and ideas. But to those not elevated to this lofty realm of mysticism and introverted reflec-

tion to the middle classes of society, he will continue to be the most popular of all poets, and his work will still exert a greater influence upon the thought and life of the great mass of American people than any other metrical master.

Chief among the causes of his lasting popularity is the element of human sympathy which pervades all his writings, and secures for them a cordial reception where the most polished lyric or loftiest didactic poem, lacking that element, would be laid aside as soon as read. Longfellow may not possess that philosophical insight which can analyze human action and trace the obscure motives which govern men; but he does have that kinship of humanity which strikes deeper than thought, which makes the reading of his poems seem like grasping the hand of a trusted friend, and receiving from him sympathy and sweet counsel. We do not miss the philosophy in the deeper, richer, fuller tide of revealed experience which flows to us through his verse. Moreover, the experience which his song reveals is not of limited character, lighting up the workings of a few emotions with the intense flame of passion, but it attains almost to universality, spreading upon all the nobler qualities of man a mild but steady glow, which imparts a quiet beauty.

While Longfellow did not search for themes which abound in beautiful pictures, or strive to fascinate with loveliness in any of his works, he did select all that was beautiful in even the humblest subject. Touched by his pen, as it produced image after image of peculiar fitness, couched in words of most delicate shade, the simplest scenes of life become veritable oases of beauty in the desert of every day experience. This exquisite taste, which rejected every element of harshness or crudity of thought or word, served to make him the first great exponent of the "School of the Beautiful" in American literature. The artistic sense of the western world, restrained by asceticism, the old Puritan idea, "Beauty is a strange God," was quickened by Longfellow's teaching, by his adaptation of European grace and refinement to western sentiment and conviction. He showed that loveliness and holiness go hand in hand; in his works the streams of moral and religious sentiment first flowed between lovely banks, in beautiful curves and with bright rippings, while the purity and clearness of their sources were retained.

It is often said that each of Longfellow's poems was intended to convey a moral; but so great was his tact, and so cultivated his artistic taste, that the lesson never intrudes, but springs so naturally from the handling of the subject that we retain it rather as a truth our own reasoning has developed than as the result of the author's efforts to teach us. Some of his most popular gems, though the morals are evident, and in other hands would be commonplace, made instinct with new life and energy by his skillful touch, become living powers, inspiring us who read with higher resolves and to nobler efforts. His writing and his life strongly enforce the

great lessons of quiet, whole-hearted acceptance of duty to God and man, of patient resignation, and of cheerful effort to make our way pleasant by a search for all that is beautiful even in the darkest spots.

Longfellow was not original in this, that like those great poets, Virgil and Milton, he drew freely upon the stores of learning and literature, but unlike them, he so changed and individualized the thought that wherever found it seems like direct inspiration. In this change to his own style there was no straining for effect, no effort to make the thought appear his own, but the thoughts of others joined his as a brook joins a river, without leaving a ripple.

Of artistic ability, the power "Of combining words so that they make music to the soul as well as to the ear," Longfellow had perhaps as great degree as any of the later poets unless it be Tennyson. His vivid imagination and refined taste enabled him to select the details of beauty; his aptitude for literature and constant study of other tongues gave a master's command of fitting words to express the picture, and the harmony and melody of his own soul furnished the music of rhythm and meter.

The forms in which Longfellow's poetic thought found expression are almost as varied as the themes he treated.

Difficult as it is to use the hexameter in English poetry, Longfellow applied it with the greatest success in the story of *Evangeline*, and the slow, steady flowing of the long, measured lines seems to harmonize with the pathetic earnestness of the story as would no less stately verse. In his other semi-epic *Hiawatha*, he was less fortunate in the choice of meter, as the constant repetition of the short, unvarying lines, gives a sense of monotony; yet, even this seems appropriate to the simple life and nature of the "Son of the Forest," and corresponds in some degree with the range of sounds that greet the dweller in the untamed but peaceful woods.

Our poet's range extended through all the lighter forms of versification, and all were handled with taste and skill, but in only a few of them did he excel the former masters; his sonnets were exact and characteristic of his genius, his lyrics were melodious and pleasing, and his ballads attractive; but we can say of none of them that they are unequalled.

It is Longfellow's poetry alone which gives him his enviable position in popular opinion; but his work as translator and prose writer enhances the literary value of his life. His prose is marked by the richest imagination, clothing the humblest life in picturesque robe and finding under the somber colors of the beetle, "filmy wings to lift him from the dullness of the ground;" genial humor, too, pervades the prose to a much greater extent than it does his poetry, humor not boisterous or harsh, but quiet, and marked by the author's own earnestness.

As a translator, he brought to his work so much of

sympathy, and used so much of poetic taste and skill, that his interpretations of foreign masters possess all of their beauty and sentiment, although they may sometimes lack a little of the original strength and fire. Even in translation the thoughts seem to spring fresh from his own great heart, and not worn and dusty as with a long journey of use and change.

As a whole his productions do not fill the reader with indifference to the great works of others, but do fit us better to appreciate the beautiful, wherever found; give a taste for higher ideals; but most of all ennoble the mind, and lead to a happier, purer, nobler manhood.

Gossip.

W. E. DAVIS, OLYMPIC SOCIETY.

Little has been written, and little said, on the subject of gossip. This term needs no defining. It, or rather its effects, are too familiar to us all. But too much can not be spoken or written against this evil, which exists in all communities to a greater or less extent. No one has lived where it does not exist, and few have not suffered either keenly or slightly from the ever-present effects of it.

Perhaps it should not be said that those who are dealing out so freely all that they know, or think they know, against their neighbor, are willfully injuring him. Yet the effects remain the same, and come as surely as do the effects of a violated law of health, no matter whether the law was transgressed through ignorance or necessity. It is not a difficult matter to understand how those who really mean no harm, may tell things which are not actually true. It is a well-known fact that no two feel, hear, or see things in the same way. Hence when they undertake to impart what they know to some one else, that information undergoes a change as marked as is the difference in the perception of the two persons.

When we hear the word "gossip," it immediately brings to our minds a little thin-visaged person, whose long nose and pointed chin, can not fail to indicate the prying nature of their possessor. Yet those answering to this description are not the only ones whose sharp tongues are working untold mischief at all times. There are very few people who do not say behind one's back what they would not say in his presence. "But," some one says, "Are we not allowed to give another warning of an evil person?" Certainly you are. But in doing it we must remember that no one has established us as judges of our associates. We have no right to say, because some one's actions do not appear right to us, that he has committed an unpardonable sin. The rule, "Judge not that ye be not judged," applies as truly now as when first spoken.

One who is constantly engaged in tale-bearing can not enjoy himself. Imagine a person whose whole

mind seems to be engaged in reflecting on some one's else faults, and then try to think of him as of a happy disposition. And your failure to think of the two natures as existing in the same person will show you how inconsistent are the two natures. Hence, the man who allows the thoughts of other's misdoings to dominate his mind, is surely paving the way for a sour and unhappy disposition. His mind becomes narrowed, his intellect stunted by the overruling feeling that he has been chosen as a special person to tear down every one's reputation by his continual tattling. He may not know into what a habit he is falling. But it is certainly a habit that will grow upon him, and, day by day, he finds himself gossiping, seemingly with increasing satisfaction. He imagines that when he is lowering some one's else reputation, his own is being exalted in the same degree. Nothing, however, can be farther from the truth. We do not honor such a person. George Eliot says, "Gossip is a sort of smoke that comes from the dirty tobacco pipes of those who diffuse it; it proves nothing but the bad taste of the smoker."

The great harm, however, in gossip, is in its effect on those involved in the idle tales. A man's reputation is his capital. His whole prosperity depends on how he is looked upon by other men. A man may suffer for years from bodily pain and not complain; or he may lose his property through accident and still be hopeful. But when he has been deprived of an honestly earned reputation, he feels, and justly too, how bitterly he has been wronged. With the loss of reputation comes a loss of influence; and thus what power for good he may have had, has been checked. His honesty, also, will be questioned, and hence his business may be hindered and even stopped.

A great share of the trouble caused by gossip, is the result of ignorance. People whose minds are not filled with useful knowledge, naturally allow their minds to tend in this direction. Our minds cannot be blanks, and so long as they are not filled with useful and elevating thoughts, so long will there be a tendency in the opposite direction. How, then, shall we prevent this evil?

To those who have passed through college and enjoyed a good education there will be little danger in this respect. But this class is small as compared with those who do not enjoy a liberal education. We may establish in every community, small circulating libraries, which, by small assessments each year can be supported and enlarged. We may organize literary and debating societies, whose purpose shall be to turn the minds from the channels of idle talk. How strange it is that people will stop to gossip when they, through books, may talk with the most learned men who have lived.

At every moment of our lives we should be trying to find out, not in what we differ with other people, but in what we agree with them, and the moment we find we can agree as to anything that should be done, then we should do it. We should push the work together. We cannot quarrel in a side by side effort; but the mo-

ment the best men stop pushing and begin talking, they mistake their inclination to fight, for piety, and the work ceases.

SCIENTIFIC.

A Paper Garden.

BY L. H. BAILEY.

A garden is half made when it is well planned. The best gardener is the one who does the most gardening by the winter fire. Brains usually count for more than muscle. Definite study evolves a definite plan of practice. The plan considers the requirements and capacities of the soil, the exposure of the land, the rotation of the crops, the succession of crops in the season, the methods of culture, the battle with insects and adverse conditions, the demands and extent of the markets, the distribution of labor. Although the plan is essential to full success, yet it must be flexible. Conditions vary with the seasons. Some plantings will likely fail from poor seeds, depredations of insects, or frosts. Such failure may require a general shift in operations. It is even well to plan for contingencies.

The college garden for the coming season is analyzed below. Those interested in gardening will do well to follow the operations throughout the year.

PLAT I. *Muck bed north-west of the forcing-house; 8 rods by 12 rods.* To be double-cropped. First crop, Cauliflower, —Henderson's Snowball and Early Dwarf Erfurt—set 3 feet by 20 inches, requiring 5,000 plants, and 4 oz. seed; radishes in rows between the cauliflowers, many varieties, sown thickly, requiring about 5 lbs. of seed. Second crop, White Plume celery—set 3 ft. by 6 in., requiring 17,000 plants and 8 oz. of seed.

The drainage of this plat was not completed until last fall, and it has never been cropped. It is therefore not known how the land will behave, and the first year's crop will be of necessity an experiment. If the spring is wet and backward it may be impossible to put on the first crop. In this case the cauliflowers will be set in a reserve patch east of the apple orchard. The cabbage maggot works great injury to cauliflowers and cabbages, making the cultivation of these crops hazardous in this vicinity. The same, or a very closely related insect, works in the radish. Radishes are to be sown thickly between the cauliflowers with the hope that they may attract the insects from the cauliflowers. Many experiments are in mind for the outwitting of the maggot.

PLAT II. *Loam, first plat east of the forcing-house; 12 rods by 27 rods.* First four rods on the west to be set to strawberries. Next two rods double cropped; 6 rows early peas, 3 feet apart, requiring 20 quarts of seed; 4 rows snap beans, 3 feet, 10 quarts; 2 rows early beets, 3 feet, 18 oz. seed; these followed by turnips or

kohl rabi. Next three rods, shell and field beans. Next three rods, Hubbard squash, 6 feet by 8 feet, 8 oz. seed. Two rods on the south end of the squash plat are to be devoted to samples of the various plants of the cabbage tribe. This "Brassica Corner" will be an interesting planting.

PLAT III. *Loam, east of plat II, beyond the north and south drive; 8 rods by 27 rods.* First row on the west, next the drive, summer squashes, 2 oz. seed. Next 24 feet to be devoted to roots, in rows 3 feet apart; 3 rows parsnips, 6 oz. seed; 2 rows carrots, 6 oz. seed; 2 rows salsify and scorzonera, 1 lb. seed; 1 row late beets—Long Blood—9 oz. seed. Next four rods, late potatoes. Next six rods, tomatoes, many varieties. Radishes will be sown with the parsnips and carrots to mark the rows.

PLAT IV. *Clay loam, south of main garden drive, next the apple orchard.* Most of this ground is now occupied by strawberries, 3 rods by 15 rods. After fruiting, the strawberries will be turned under and the ground set to Golden Dwarf celery, requiring over 7,000 plants, and 4 oz. seed. In the south-east corner of this plat is an unoccupied area, 4 rods by 7½ rods, which will be planted with various cucurbits.

PLAT V. *Sand, north of horse barn, and just east of asparagus bed.* A very small area now sown to spinach, which will be followed by various cucurbits.

PLAT VI. *Sand, north-west of horse barn, extending west to spruce hedge; 15 rods by 10 rods.* This area is to be set aside as a permanent nursery and exhibition ground. A strip about a rod wide along the west side, directly opposite the forcing-house, is now occupied by nursery stock. The next 4 rods is in strawberries. These strawberries will be plowed under as soon as the fruit is harvested, and the land used for late peas, beans and cucumbers. The remainder of the plat, 10 rods square, will be divided into halves, the west half being used for nursery purposes. The east half will this year be devoted to novelties and uncommon vegetables. Among the interesting plants to be grown here are the following: Strawberry tomatoes, Arizona and Mexican potatoes, ornamental-leaved beets, chard, peanuts, New Zealand spinach, egg-plants, peppers, gesse, okra, artichoke, cardoons, quinoa, martynia, nasturtiums, Japanese corn, self-husking corn, sorghum, basselle, asparagus bean, teosinte, kaffir corn.

PLAT VII. *Black soil, between farm house and horse barn; 6 rods by 11 rods.* Onions—Yellow Danvers, Yellow Cracker, Red Weathersfield, and some odd sorts—requiring about 2 lbs. seeds. Also 1 row leeks. Cucurbits about the borders.

PLAT VIII, THE WASTE BASKET. *Sandy knoll, south-east of horse barn.* To be used, as heretofore, for odds and ends. Among other things will be grown onion sets, early lettuce, early cucumbers, corn salad, celeriac, varieties of beans, early kohl rabi, lentils, etc.

PLAT IX. *Sand, native plum orchard, east of horse barn.* Sweet corn, first planting, 3 pints seed.

PLAT X. *Three acres east of apple orchard.* One thousand early cabbages, followed by horse-radish; 3,000 late cabbages; corn and potatoes; cucurbits.

PLAT XI. *Young peach orchard back of Professor Johnson's.* Cucurbits, potatoes, and tomatoes grown for seeds.

Oak Galls.

BY C. P. GILLETTE.

Most readers of the Speculum are familiar with those peculiar growths on red and black oaks commonly known as oak apples; and known that they are caused in some way by an insect. Nearly every one has observed this much, but probably few can tell whether these peculiar excrescences occur on leaf, twig, or branch, or what sort of an insect it is that produces them.

Nearly one hundred and fifty species of galls occurring on our native oaks, have been described and named. The majority of these are found on leaves, but many grow from buds and twigs. In size they vary from those that are no larger than a small pin head, to those that are an inch and a half, or more, in diameter. Nearly all oak galls are produced by a single family of insects, the Cynipidæ, belonging to the order Hymenoptera. It is to this order that the ant, the bee, the wasp, and similar insects belong. Many of the insects in this order possess most wonderful instincts and not least among these are the Cynips.

It is a curious fact in the habits of these gall producers, that they confine their attacks almost exclusively to the different species of oaks. The exceptions are, a few species that attack the rose bush, one that attacks the potato, and a very few that attack plants belonging to the Genus *Rubus*, to which belong the raspberry and blackberry. Not only do the Cynips confine their operations closely to the oaks, but each fly has a favorite species of oak to work on, and seldom, or never attacks any other. When a Cynip does work on more than one oak, these oaks are very closely related botanically, *i. e.*, no Cynip that attacks one of the white oaks ever attacks the red or black oaks, and *vice versa*. Indeed, closely allied species of oaks have been determined by their galls, when botanists were unable to determine their position in any other way. So it has been truly said that insects are often better botanists than man.

On our six common oaks, the white, swamp, burr, chestnut, red, and black, there are not less than forty described species of Cynips, each producing a gall different from the other. Of these, about twenty-five occur on leaves, and the rest on twigs and buds.

I am glad to say that a large majority of all the named galls of N. A., are now in the college collection to be seen by anyone who wishes to look at them.

But what is a gall? Is it an insect secretion or a veg-

a plant, and is produced to furnish nourishment and protection to the insect that grows to maturity therein. Galls are therefore purely vegetable. The food they supply is perfect; that is, the larva grows to maturity and deposits no excreta in the cell.

It seems wonderful that in response to the sting of an insect that is a parasite on a plant, that plant should begin to supply food and protection to the grub that preys upon it and is injurious to it.

Such is the case however, and the twigs often die because the nourishment they should have received has gone into a gall. More wonderful still than this, is the fact that the gall is as dependent for its development upon the health of the growing larva, as the latter is dependent upon the growth of the former. If for any reason the little gall maker dies before it is fully grown, the gall at once ceases to develop and also dies.

Some galls, as those that occur in buds, are composed of a single capsule, or thin walled cell, appearing like a miniature egg. In this the grub feeds and grows. In others, as in the case of large oak apples, there is a large outer shell inclosing the inner one where the grub feeds, and the space between the two is filled with a spongy or corky substance, or with radiating fibers. Galls containing this outer thick part, often have within their substance numerous little white larva that draw their nourishment from the gall and grow just as the one in the central shell. These are also Cynips and differ from the latter in size, being smaller. These are known as guest flies because they live and feed in galls produced by other insects. If these guest flies ever did produce their own galls, they have now lost the art, just as the cow-bird has lost the art of nest building.

Although the Cynips that produce our oak galls have, in most cases, a very close resemblance, the galls they produce are exceedingly varied, and in every case the gall is as characteristic of the fly that produced it as the fruit of any plant is characteristic of that plant.

These are a few of the characteristics of this family of insects that make them of so much interest to the student of natural history.

A Botany Club.

In Washington some young people, including teachers in the city schools, government employes, and others, have organized a club for the study of botany. They meet every two weeks from house to house, and make occasional excursions to places of interest near the city. At each meeting one or two papers or talks are given, and freely discussed. Some plant is analyzed each time, by all present. A question is also proposed, to which each gives a written answer; these replies are examined by some one appointed for the purpose and commented on at the next meeting. A spirit of investigation is

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AGRICULTURAL COLLEGE, APRIL 10, 1888.

WITH this number, the publication of the SPECULUM as a monthly begins. The change has often been suggested and discussed by both students and alumni, and we hope that it will meet the approval of our readers.

The change seems necessary for many reasons. Much of the interest that alumni feel in the paper, depends upon the amount and freshness of college news and alumni personals. When issued quarterly, much matter that should appear in those departments is unavoidably crowded out, and much more can not reach our readers till after so long a period that it is of little value to them.

The increase in the number of subscribers and the lively interest in the welfare of the paper, as shown by the expressed sentiments of many students, induced the board of management to undertake the change.

At a meeting of the Students' Organization held March 26, the necessary changes were made in the constitution governing the management of the paper, and we were authorized to begin the publication on the new plan, April 10th.

The paper will be reduced in size, and fewer literary articles will appear in each issue. The various societies will be equally represented in this department as heretofore. Other departments will have nearly as large a space as in the quarterly.

To lessen the work of the business manager he is to

have an assistant who takes charge of all matters pertaining to the circulation of the paper. Mailing can be done more promptly under this arrangement, and it is hoped that fewer SPECULUMS will fail to reach the parties to whom they are addressed.

Subscribers should bear in mind however, that this will not remove the necessity for them to notify promptly when addresses are changed. Almost all complaints of non-arrival of the paper in the past have been traced to that cause.

The subscription price has been raised to seventy-five cents per annum, payable in advance. It has been placed as low as the increased expense of publication will admit, and all subscribers whose terms of subscriptions have not yet expired will receive the proper credit on the books.

AMONG the various improvements that have been made during recent years, one that has been often suggested, has not yet found a place. The need for a college hospital has never been more apparent than during the present term. With the crowded condition of our dormitories it is impossible to secure suitable accommodations for those who are ill. No matter how good the general order, the quiet that must be preserved in cases of severe illness cannot be secured in either Wells or Williams Hall.

The system of steam heating too, though well adapted for general use cannot be so regulated as to afford a temperature suited to the needs of the sick room.

Recovery from slight ailments would be much more speedy and in cases of severe illness the invalid's chances of final recovery would be greatly increased if we had a separate building for the accommodation of the sick. Much of the interruption in college work that has occurred this spring could have been avoided if there had been such a building on the college grounds. Prompt isolation of the first cases of measles and mumps that appeared would have saved many students from the vexatious loss of time that they have had to endure.

A cottage that would meet the needs of the institution in every respect need not be either large or expensive. One that would answer every purpose could be erected for a few hundred dollars. Then good nurses could be secured and care of the sick need not be left to fellow students, whose efforts, though kindly intended, are often productive of bad results. Such a building must be provided, in time, and should not be neglected another season.

IN the death of William Freeman Gilbert, which occurred March 29, the SPECULUM records for the first time in nearly five years, the death of a student at this college. Again we have been called upon to mourn the loss of a member of our student family. Though he had been with us but for a little time, we feel that his hopes and aspirations led him towards the future that each one of us is striving to attain.

During his whole life he had carried a heavier bur-

den than falls to the lot of most of us. Constant ill health had made his efforts to obtain an education doubly hard, but he was not discouraged, and bravely took up the tasks assigned him.

Having entered college in August, 1887, he remained till the close of the autumn term in November. He then returned to his home, and though suffering from frequent attacks of illness, was ready and anxious to take up his college work at the opening of the spring term. This he did, but after attending classes during one week, he took a severe cold, and on his eighteenth birthday, which occurred March 5, he was too ill to attend to college duties. The best of medical attendance was at once secured, and all that the tender care of a loving mother could do was done for him, but to no avail.

To most of us he was only known as "a student of M. A. C." College duties and customs prevent most of us from forming intimate acquaintances outside of the class or society to which each belongs. But as we stood with uncovered heads and watched the passing of the sorrowful procession that bore his body homeward, there was not one but felt he had lost a friend.

Our sympathy flowed out toward the bereaved parents and thoughts of their grief stricken home crossed many a mind in that sorrowful assembly.

His life was short, yet it was long enough to prove the purity and steadfastness of his purpose. He did not shrink from either toil or trouble. He put on his armor and died at his post. May we from his example gain some lesson for ourselves, so that when the dread summons comes, our memories may be as fondly cherished as is that of our departed brother.

THE experiment station, frequent mention of which has been made in these columns, is at last well under way. On the first day of February, 1888, President Cleveland signed a bill appropriating \$15,000 to each State for conducting experiments during the fiscal year beginning July 1st, 1887, in accordance with the provisions of the Hatch bill, passed at the last session of Congress.

Under the Hatch bill the appropriation is payable in quarterly installments, October 1st, January 1st, April 1st, and July 1st. There was therefore due, at the time of the signing of the bill, by the President, \$7,500. That amount has been paid to the Secretary of the college and the third payment is expected in a few days.

The experiment station has been organized as a department of the college with the following officers:

Director.—Pres. Edwin Willits.

Sec'y and Treas.—Sec'y Henry G. Reynolds.

The line of experiments to be conducted here has been divided into six departments with the following professors in charge.

Chemistry and Meteorology, Dr. R. C. Kedzie.

Entomology, Prof. A. J. Cook.

Botany and Forestry, Dr. W. I. Beal.

Agriculture, Prof. Sam'l Johnson.

Horticulture, Prof. L. H. Bailey, Jr.

Veterinary Science, Dr. E. A. A. Grange.

The professor at the head of each department is to have charge of the work in that department and will be aided by assistants as soon as the necessary arrangements can be made. In selecting men to fill these positions post-graduates will have the preference in all cases where special fitness for the work is manifested. Student labor will be utilized wherever practicable, but in such way as will not interfere with the established work system.

Besides the work at the college, a series of experiments on the "pine barrens" is to be carried on under the supervision of Dr. Kedzie, aided by Dr. Beal and Prof. Bailey. Eighty acres of land has been secured, by gift, near Grayling, for this purpose. Twenty acres will be cleared and plowed immediately and it will be cropped this season to subdue and put in condition for tests of grasses and other crops.

The entire eighty acres will be fenced at once and will be protected from forest fires by clearing a strip around its boundary line.

Dr. Beal has been authorized to contract with farmers in other parts of northern Michigan, to test grasses under his direction, he furnishing the seed.

Experiments relating to the dairy interest are to be under the direction of Messrs. Chamberlain and Horton of the State Board of Agriculture. These gentlemen will visit other states and, after investigating the subject, will decide as to the nature of the experiments and the best location for making them.

An experiment station library, to contain the scientific works needed in the various departments will be established.

For these special objects the following appropriations have been made for this year:

Pine barren experiment	\$2,000.
Dairy	1,000.
Library	1,000.

The remaining \$11,000 will for the most part be divided among the six departments and will be used in securing apparatus and stock for future experiments.

The station is to be so conducted as not to interfere in any way with the regular work of the college, and if properly conducted, cannot fail to be a valuable acquisition. We look for important results from this new venture.

THE exchange list of the SPECULUM has recently been overhauled, and several new college papers are now received. Students will find much to interest them in these papers. They give a fair representation of the literary work done at the colleges at which they are published, and in their news columns display the general trend of social and student life.

These publications can be found in the reading room at the library, and will repay perusal by every student. Glance at them occasionally and learn what students are doing and saying at other colleges.

ATHLETICS.

Sports are receiving a decided "boom" this spring, and the prospects are that athletics, which have held so high a place in our college, will be more than usually interesting this season. Organized power is always more effective than unorganized power, and the local and State college associations, that have been formed, foretell more satisfactory results from athletic contests than have heretofore been realized.

G. J. Jenks from this institution met representatives from Olivet, Hillsdale and Albion colleges at the latter place on March 24th. The committee drew up a constitution, and formed an organization, to be known as the Inter-collegiate Athletic Association. The object is to do away with the small field-days, and have one annual field day, with representatives in the contests from each of the colleges entering the association. The expenses of the organization will be much less than they were in the old method and will be defrayed by per capita assessments on the male students enrolled at the different colleges. The place for holding the first field day has not been determined on as yet.

Something that the college has been agitating for a number of years, and which now seems a certainty, is a gymnasium. The State Board have appropriated two hundred and fifty dollars (\$250.00), to be used in getting appliances, and Secretary Reynolds and Lieutenant Simpson were appointed to purchase and put in the apparatus. The drill-room in the armory has been selected as suitable for the purpose, and the fixtures as far as obtained, are: parallel and horizontal bars, trapeze, rings, knotted ropes for climbing, parallel, horizontal and vertical ladders, dumb bells and Indian clubs. Other appliances will be put in as soon as possible. No regular training class will be organized until next fall term, when the Lieutenant proposes to organize the Freshman class, and give them a regular course of training for two or three terms. The gymnasium will be open to volunteers from one till six o'clock, p. m., except when regular military exercises are progressing. The Lieutenant will be there a part of the time, and has kindly consented to give instructions to those who desire them. Now boys, let us patronize this effort for our welfare, moderately at first, for too violent exercise is, as we all know, detrimental. Let us use the means thus provided, and in doing so build up a strong physical structure, without which our intellectual attainments will avail us little.

J. N. Estabrook, B. K. Canfield, A. E. Bulson, Jr., and A. B. Cordley, of this college, met representatives from Hillsdale, Albion and Adrian colleges, at Jackson, on the 17th of March, and held a meeting for the purpose of organizing an Inter-collegiate Base Ball Association. E. D. Palmer, of Hillsdale, acted as chairman

and J. N. Estabrook as secretary. A constitution was drafted, which is to be submitted to the several clubs for approval. It provides that the name shall be the "Michigan Inter-Collegiate Base Ball Association. Two games are to be played by each club during the year, one on its own grounds, and one on the grounds of each opponent. One director is to be elected from each club, and these shall have entire charge of the affairs of the association. While there, the Secretary received a telegram from the University, saying they would not enter the league this year.

The University nine have lately been negotiating for a game with M. A. C., but as they did not join the association, the probability is that we will not play them this season on account of other games in the association.

The officers and players of our ball team for the coming season are as follows: Manager, R. C. Carpenter; assistant manager, J. N. Estabrook; secretary, A. E. Bulson; steward, O. C. Hollister. Players: B. K. Canfield, p.; N. C. Smith, c.; J. L. Morris, 1 b.; A. E. Bulson, 2 b.; L. Burnett, 3 b.; G. L. Chase, s. s.; ———, l. f.; F. B. Stockwell, c. f.; A. B. Cordley, r. f. The uniforms for the ball team are to be of dark brown color, with old gold trimmings, and brown stockings. The new suits will be of the finest quality of goods, and we think the boys will present a fine appearance in them. The old uniforms will go to the second nine, and the "blue" uniforms to the third nine.

The committee on football report a full organization with thirty members ready for practice as soon as the weather permits. The teams will get new canvass suits.

Are you "on" to the "Racket"? The "Racket" is the name of a tennis association recently formed here for the purpose of getting a reduction on tennis supplies, to have system in games, and to select and train contestants for the annual field day. The organization has adopted a constitution and elected officers. It is divided into four classes, each class having a member on the Board of Control. The officers are: Chief, E. R. Lake; recorder, G. S. Jenks; umpires, A. L. Waters, and D. A. Garfield; scorer, Ben. L. Jenks; committee of control, Miss Chippie Harrison, '88; Miss Mamie Smith, '89, H. F. Hall, '90, Weideman, '91. H. W. Baird, Sub. faculty.

A base ball nine, composed of old players from Yale, Harvard, Williams, Michigan and Northwestern, will go east from Chicago, in April, and play the teams of Princeton, Yale, Pennsylvania and other colleges.

The Harvard freshmen have declined the challenge of the Yale freshmen for a boat-race next summer.

COLLEGE NEWS.

Mumps! measles!! misery!!!

Prof. Cook lectured at Farmers' Institutes in Wisconsin.

Dr. Grange lectured at Farmers' Institutes in Wisconsin.

Two hundred forty-seven students here at the middle of the term.

L. H. Dewey took a Civil Service examination at Lansing, March 24th.

Prof. Mac Ewan lectured at Farmers' Institutes and read Browning.

The third installment of the Hatch appropriation is expected this week.

Why is the new dormitory like a savings bank? Ask Harry Baird.

R. C. Carpenter investigated strength of building materials at Cornell.

Mrs. Ella Kedzie of Olivet, spent the Easter holidays with Dr. R. C. Kedzie.

C. S. Crandall and C. P. Gillette worked at micro-photography at the college.

Prof. Bailey delivered a course of lectures in Horticulture at Cornell University.

President Willits and wife and Dr. Kedzie spent part of the winter in California.

A new gas machine has been put in at the Mechanical Laboratory since our last issue.

The annual cattle sale will occur April 18th. About twenty-five head will be disposed of.

The "little folks" of "Faculty Row" formed a literary society during the winter, known as the "S. A. S."

The armory was utilized as a tennis court during the winter. It proved a fine place for playing; also for taking cold.

After his return from California, Dr. Kedzie was given a birthday party, by the young people and faculty members, on the grounds.

Dr. Beal will have three stations for testing grasses, one on the east shore, one on the west shore, and one in the center of the state.

The "co-eds" are taking a course in gymnastic training under Lieut. W. L. Simpson. Look out for further developments on field day.

Every alumnus should attend to getting up a good story to tell the historian who will soon be around. Particulars are wanted, the more the better.

New books to the amount of \$1,800 will be placed in the library this term. One thousand dollars will be invested in books for the experiment station.

Work on the foundations of the new buildings has begun. The dormitory will be heated by hot water, as the expense will be less than steam heating.

Prof. Pattengill looked after the interests of Michigan school teachers, and boomed the *School Moderator*. He builds a fine residence in Lansing this season.

Mr. and Mrs. A. W. Stanley, Brooklyn, N. Y., distant cousins of Stanley the explorer, and brother and sister of Theo. and Robt. Stanley, visited the college Nov. 13th.

The State Board has appropriated two hundred fifty dollars for gymnastic apparatus. Much of it will be made here, hence a large outfit can be provided with that amount.

Misses Carpenter, Beal and Smith represented various states in an exercise under the direction of Prof. Pattengill, before the members of the National Grange, in November.

J. B. Cotton studied law, W. L. Holdsworth draughted in Traverse City, E. R. Lake studied in the Botanical Laboratory, P. B. Woodworth spent the winter at Cornell studying physics.

The Horticultural building will have a new forcing-house, heated by steam; also, a room for photographic purposes. Records of the comparative forms of fruits will be kept from year to year, by means of photographs.

L. G. Carpenter and wife spent the winter at Johns Hopkins. "L. G." studied pure mathematics. "Mrs. L. G." visited picture galleries. Both visited Mount Vernon and Washington.

Prof. Beal spent most of the winter on Vol. II of his work on Grasses. He attended the meeting of the National Grange, The Forestry Convention, and declined offers to lecture in New Jersey and Wisconsin.

W. Petrie, H. F. Hall, A. B. Cordley and L. A. Bregger, spent the winter on the grounds. They roomed in College Hall, and tell stories of wonderful success in the culinary art. They will board next winter, however.

A Draper's self-recording thermometer hangs at the north door of the Chemical Laboratory. A new two-light dynamo has been added to the apparatus. Sunshine recorders have been placed in position near the south entrance.

Orators for the commencement were selected by the faculty, March 30th. They are H. B. Cannon, Miss Mollie Carpenter, L. C. Colburn, Miss Chippie Harrison, F. H. Hall, W. M. Munson, W. A. Taylor and Geo. L. Teller.

The library building is undergoing a thorough renovation. The President's office has been papered and decorated, with an ornamental frieze. The ceiling of the reading room has been calcimined, and frieze and moulding added.

Prof. Bailey's gray established its reputation as a trotter during the winter. Miss Smith held the reins during two trials of speed, and A. B. Cordley was "spilled out" of the cutter while making a third test. The horse can be had cheap.

The Detroit *Evening News* of March 28th, published a list of over fifty graduates of this college who have occupied, or now hold, positions in the various colleges of the country. They are distributed among seventeen states and territories.

Junior class officers: Pres., Wm. Lightbody; Vice Pres., G. J. Jenks; Sec'y, E. N. Pagleson; Treas., W. L. Rossman. Literary officers: Prophet, G. J. Jenks; Historian, E. N. Pagleson; Statistician, D. F. Anderson; Toast Master, D. A. Garfield.

Senior class officers: Pres., J. N. Estabrook; Vice Pres., D. A. Smith; Sec'y, C. D. Lawton; Treas., A. B. Goodwin; Marshal, W. F. Staley; Literary officers: Orator, N. S. Mayo; Poet, Henry Thurtell; Historian, H. E. Harrison; Prophet, A. B. Cordley; Statistician, J. C. Stafford; Toast Master, W. J. Hinkson.

Sophomore class officers: Pres., F. B. Stockwell; Vice Pres., J. H. Hooper; Sec'y, C. E. Ferris; Treas., E. G. Cooney; Marshal, W. Petrie. Literary officers: Orator, F. G. Clark; Historian, H. J. Hall; Statistician, Ben. L. Jenks; Prophet, F. S. Robinson; Toast Master, W. W. Morrison.

Freshman class officers: Pres., R. W. Blake; Vice Pres., E. E. Gregory; Sec'y, G. C. Monroe; Treas., S. K. Boyd; Marshal, Harry Hunter. Literary officers: Orator, C. L. Crandall; Poet, Miss Ida Hooker; Historian, A. F. Gordon; Prophet, L. Burnett; Statistician, J. L. Potter; Toast Master, H. B. Lazell.

The statement has been made by many newspapers, that tile drains have greatly augmented floods and droughts, by the sudden removal of water after rains. Experiments will be made by Dr. Kedzie and Prof. Carpenter, to determine the relative amounts of rain fall and drainage on the college farm.

Faculty lectures have been given in chapel as follows: Prof. R. C. Carpenter, Wed., March 7; subject, The Coal Fields of Pennsylvania. Prof. Sam'l Johnson, Wed., March 21; subject, What Does Agriculture Offer to the Educated Young Man. Prof. E. J. Mac Ewan, April 4; subject, Robert Browning and his Poetry.

The oratorical contest between the three literary societies was held in the chapel Friday evening, April 6. The following speakers took part: W. A. Taylor, H. B. Cannon, L. C. Colburn, D. A. Anderson, N. S. Mayo. The decision of the judges had not been announced when we went to press. Full report in our next.

The "pine barren" experiments will be made with view of finding a foliage plant that can be used for green-manuring. All the varieties of clover, vetches, peas, and grasses will be tried, both for forage crops and for turning under. Particular attention will be paid to methods of cultivation, especially in such operations as rolling and other processes for compacting the soil and preventing drought. No manures will be tried except marl, salt and plaster.

The addition to the Mechanical Laboratory was completed during the winter. The inside work was done by foreman Campbell and Mr. Petrie. The ground floor will be used for wood working machinery. The east room contains a testing machine with power of 52,000 pounds. The blacksmith shop is fitted up with power blast fires.

The experiments on agricultural chemistry under Dr. Kedzie, will be made on corn ensilage. Beginning in August, specimens will be analyzed before putting into the silo, and this will be continued at intervals of one week till corn is dead ripe. Comparison of analyses will determine at what stage corn should be put into silo, to secure best results.

The experiments of this season in the garden will be made upon *Cucurbitaceæ* to determine, if possible, the immediate effects of cross fertilization. The experiment will include all the known varieties that can be obtained, and will be the most extensive experiment of the kind ever made in the United States. The tomato experiments begun last season will be continued.

Work on the *Harrow* for '88 is well under way. The class of '90 have elected the following board of editors to conduct it: Editor-in-Chief, H. M. Williams; Poetical Editor, A. L. Waters; Literary Editor, Geo. S. Jenks; Art Editor, H. F. Hall; Statistical Editor, H. L. Bunnell; Historical Editor, J. R. McColl; Sporting Editor, W. W. Morrison; Business Manager, F. G. Clark.

The horticultural branch of the experiment station will devote its work to the originating of new fruits and vegetables. Part of the Parmelee farm north of the college grounds will be secured as a site for a nursery in which seedlings of all the hardy North American wild fruits will be grown. The best of these will be selected as a foundation upon which to base desired improvements. All known cultivated varieties will be grown and distributed to the various horticultural societies throughout the State.

The members of the Freshman class mourn the loss of their classmate, W. F. Gilbert, who died at the college March 29th. The deceased was born in Ontario, March 5, 1870. Had lived at Sterling, Arenac county, for some years, and entered with the class of '92, in August, 1887. The winter vacation he spent at his home, and at the beginning of the spring term he returned to college. About March 1st he took a severe cold, which speedily terminated in quick consumption. The body was taken to his home for interment.

PERSONALS.

Now that the *SPECULUM* is a monthly, we more earnestly than ever request of all persons interested, information concerning graduates, or under-graduates who have left the college. Give us your assistance and we will endeavor to make the personal department a reliable and interesting source of information as to the accomplishments, whereabouts, and occupation of former students.

Kizo Tamari is Prof. of Agriculture in the Imperial Agricultural College at Komoba, Tokio, Japan.

Edgar Dudley, of the Royal Agricultural College, Cirencester, Eng., visited the college during the winter.

Dr. W. J. Beal was unanimously elected corresponding member of the Torrey Botanical Club, of Columbia College, in October last.

Hon. Mr. Freeman, member of the Ontario Parliament, was at the college during the sickness and death of his nephew, W. F. Gilbert.

'62.

C. A. Jewell has returned from Missouri, and is now farming at Medina, Lenawee Co.

'68.

Prof. S. M. Tracy, formerly Professor of Botany and Entomology at Columbia, Mo., spent the winter in the Department of Botany at Washington. He is now director of the Mississippi Agricultural Experiment Station.

'69.

E. H. Bradner and wife are engaged in the Christian Science Mind Healing in Sacramento, Cal. He considers himself greatly benefitted in a recent severe illness, by this mode of treatment.

'70.

Chas. W. Garfield spent two weeks during the winter lecturing on

Horticulture for Farmers' Institutes in Wisconsin. Perhaps this is a good precedent for Michigan.

'71.

E. M. Shelton is director of the Kansas Experiment Station.

Dr. H. P. Halsted spent the winter at Bellevue Hospital, New Jersey.

B. D. Halsted spent part of his winter vacation at Passaic, N. J.

'74.

C. L. Bemis is superintendent of Ionia county schools, and is well fitted for the position. In 1870 he was teamster on the Horticultural Department, with hardly a thought of entering college.

Prof. C. L. Ingersoll of Colorado Agricultural College, delivered a powerful address on the value of co-operative and concerted action among farmers, at a farmers' picnic near Fort Collins, Col., in October.

'75.

F. J. Annis is doing active work as secretary of the Colorado Board of Agriculture.

Chas. Goodwin, who has spent a considerable time in Kansas, writes that he is much better, and will soon return.

'76.

J. D. Stannard sold his farm in Wisconsin, and has gone to Colorado to engage in the same occupation.

'77.

W. O. Fritz was married during the winter.

W. C. Latta, James Troop, '78, and T. D. Hinebauch, '85, are members of the experiment station board, at Purdue University.

'78.

We have the pleasure of introducing to you, Miss Margaret Helen Breck, of Paw Paw, born Feb. 10th, 1888.

Prof. James Troop, is a member of the agricultural experiment station board, at Purdue. He is also one of the directors of a young daughter of six weeks or more.

Eugene Davenport is to take a special course in botany at this college and assist in the experiments in that department during the summer.

C. C. Georgeson is now Professor of Horticulture in the Imperial Agricultural College of Japan, instead of Professor of Agriculture, as formerly.

Dr. Joel S. Pardee will change his residence from New Troy to Three Oaks, where he will continue the practice of medicine.

'79.

Born to Mr. and Mrs. C. B. Charles, a daughter, April 3d.

C. P. Cronk graduated in medicine from the Columbian University, Washington, recently. He has a young child.

Chas. E. Sumner is one of the law firm of Collins & Sumner, Toledo, O. He graduated from the Columbian Law School at Washington in 1886, and was admitted to practice in the Ohio Supreme court and the U. S. courts in 1887.

A. A. Crozier, recently assistant in the department of botany at Washington, has accepted the position of botanist in the Iowa Agricultural Experiment Station. While in Washington he took an active part in local botanical circles, organized the American Botanical Club, and was secretary of the Washington Biological Society.

'80.

F. A. Gulley is director of the Texas Agricultural Experiment Station.

'81.

C. D. Phelps is teaching at Manton.

C. W. Clark is studying medicine in Detroit.

Dr. A. L. Seeley, Mayville, for two years with '81, has a young child.

R. B. Barber, for three years with '81, is in the ink business at Atchison, Kansas.

C. W. McCurdy was on the grounds recently. He is superintendent of the Sand Beach schools.

W. H. Burgess, attorney at law, Crosswell, Mich., is prosecuting attorney of Sanilac county.

Howard M. Holmes has left Lansing and is now editor of the Ann Arbor Register.

W. S. Delano has left the signal service and is engaged in fruit growing in Nebraska.

Arthur Jones, Chas. McKenney and C. C. Lilley, '84, while attending the meeting of the teachers' association at Lansing during holidays, visited the college. McKenney is taking a course at Olivet.

Herbert Bamber has principal charge of one of the U. S., light-house districts with headquarters at Philadelphia.

E. C. McKee is engaged in farming and raising short-horn cattle at Laingsburg. He is married and has a four year old daughter.

Jason Woodman, lecturer for the State Grange, was at the College recently on his way to deliver a lecture at Okemos. His work as a lecturer is receiving much favorable comment.

Harvey A. Price, aged 27, died of consumption at Detroit, March 3rd, after an illness of two and one-half years. He was a graduate of the law department of the University, and practiced law at Muskegon till taken sick. The remains were taken to Locke, Mich. He leaves a wife and many friends to mourn his loss.

J. L. H. Knight visited the College in November. He is an extensive breeder of short-horn cattle and Poland-China swine, and took the sweepstakes on swine at the Custer county, Neb., fair; reports having raised 159 bushels of Pride of Nebraska potatoes from one bushel of seed, and yet it was a poor year for potatoes. He is married and has one son and two daughters.

'82.

T. F. Millspaugh is studying law at Lyons.

E. D. Millis fails to see the practical use of the M. A. C. course. We are sorry.

J. E. Coulter, book-keeper for the Capital City Wagon Works, married Miss Alice Weed, '82, during the winter.

E. N. Ball is at present secretary of the Michigan Merino Sheep Breeders Association, and has in charge the responsible duty of making up the Michigan Merino Sheep Register.

W. T. Langley has completed his third year as principal of the St. Ansgar, Iowa, schools, where he will remain till June. He taught in the Mitchell county normal institute during its three weeks' session last fall, and has been tendered the same position this fall with advanced wages. He has not lost faith in agricultural colleges yet.

W. H. Coffron graduated from the medical department of the Georgetown University recently. He has left the signal service and is now at the College making some special investigations in aluminum. Mr. Coffron has been appointed chemist for the American Aluminum Company and is fitting up a laboratory for his use at Findlay, O. He has a wife and a young son.

'83.

W. F. Hoyt is practicing medicine at Grand Rapids.

C. M. Weed is entomologist for the Ohio Experiment Station. He was married during the winter.

A. C. Redding, Professor of Chemistry and Physics in Findlay College, rejoices over their rapidly growing institution. He hopes to be with the old M. A. C. boys in August.

Herbert W. Collingwood was married April 5th to Lulie D. Sullivan, of Chicago.

'84.

E. C. Bank rejoices over a new baby.

F. J. Hodges graduated from the Chicago Medical College in March.

J. J. Bush was recently married to a lady from Milwaukee.

C. P. Gillette has been induced to remain for a time as assistant in entomology by a substantial increase in salary.

Charles Baker is now druggist at Oscoda. He is a graduate of the pharmacy department of the University, and is a great favorite.

Llewellyn Bonham is in partnership with his father, on his father's farm at Oxford, O., and has great promise of success.

Miss Alice Johnson has been at home during the spring vacation. She is teaching in the Lansing schools.

C. A. McDiarmid takes an active interest in the grange, as well as in the management of his farm. He has for some time been acting as secretary of Pomona Grange, of Manistee county.

W. C. Stryker and his brother D. J. Stryker, '85, are engaged in the real estate business in Los Angeles, California.

'85.

Harry Gladden taught in Clinton county during the winter.

E. S. Antisdale taught the Nottawa school near his home.

Watkins and Leonard with '85, are in Los Angeles, California.

T. O. Williams, once with '85, returned from Kansas during the winter and soon after was appointed county surveyor of Allegan county.

C. B. Collingwood has gone to Arkansas as chemist under the Hatch Experiment Station Bill. He taught at Howard City during the winter.

Henry Jenner had a petroleum refinery in operation in the window of his drug store in Allegan, during the winter, which attracted much attention.

E. A. Bartmess resigned his position as teacher in the Tippecanoe schools and started, about the first of January, for Lowell, Mass., where he intended to engage in real estate business. He also accepted a position as tenor in a Lowell church choir, with a \$1,000 salary.

'86.

A. E. Brown is in Chicago Medical College.

E. A. Whitney is practicing law at Frankfort, Benzie county.

A. L. Nichols was married March 10th, to Miss Carrie Jessup, of Orangeville, Barry county, his home.

W. G. Everhart spent the winter with Rand, McNalley & Co., Chicago. He will survey during the summer.

G. L. Spangler positively refused to run for Lansing city clerk this spring. He has been admitted to practice in the circuit court and passed a very creditable examination.

'87.

Hume, Sanson and Wheeler were at the college during the holidays.

Harry McArdle is teaching in the grammar department of the Homer schools.

H. L. Chapin is at home. Will engage in railroad surveying during the summer.

W. C. Hall frequently visits the grounds. He is teaching a ten months school at DeWitt.

E. A. Burnett is on his father's farm in Shiawassee county. He presented a paper on forestry at the Owosso institute.

J. C. Duffey was married to Miss Maggie M. Holmes, of Homer, in March, and soon after left for Brooking, Dakota, where he will become foreman of the Agricultural College grounds.

E. W. Redman, with his young wife, started for Cuba in October to take charge of an apiary. Not finding prospects for pay very promising, he only remained about five weeks. Did not think it a very pleasant place to live. Is now farming at home.

O. C. Wheeler and O. S. Whitmore, both farmers of Ingham county, were recently elected respectively to the offices of school inspector and township clerk. They are also active members of the Lansing Grange.

'88.

Bert Travis has been teaching near Elm Hall, Gratiot county, during the winter.

Arthur K. Collins is teaching at Walton. He has a wife and child.

Paul M. Chamberlain was foreman of the wood shops at Dakota Agricultural College during the winter.

J. A. Thompson is in the employ of the San Diego Lime and Marble Company, San Diego, California.

'89.

C. M. Hemphill has been elected captain of the Ypsilanti Light Guards.

J. A. Wheeler has gone to Tellurite, Colorado, where he expects to clerk in a bank.

E. N. Pagleson was foreman of the iron shops at Dakota Agricultural College during the winter.

'90.

Miss Jessie Beal spent the early part of the winter at Somerville School for young ladies.

The Freshman class at Cambridge University, England, numbers eight hundred and thirty-seven.

It is reported that Harvard is making offers for the Massachusetts Institute of Technology, for the purpose of making it her own scientific school.

COLLEGES.

Trinity's new gymnasium contains a theatre.

The Harvard boat club is over \$1,800 in debt.

Girard College educates 1,000 orphans annually.

Dr. McCosh of Princeton, will receive a pension of \$2,500 a year.

At Williams the glee club has been installed as the chapel choir.

Only four per cent of the Yale Seniors take Latin and Greek electives.

The tuition fee at Yale is \$140, at Columbia \$100 and at Harvard \$150.

Yale's professors have published fifty-one books in the last six years.

At Harvard there are 271 men in training for the various athletic teams.

Twenty-six Cornell freshman failed to pass their mid-year examination.

Rev. David Lathrop Hume, aged 98, is the oldest surviving graduate of Yale.

There is an advance of five per cent. in college attendance, this year over last.

Cambridge University, England, contains about one hundred distinct colleges.

Princeton's new triennial catalogue contains the names of over 6,000 graduates.

Three Harvard professors are said to be possible presidents of the new Clark University.

The United States has 364 colleges and universities, with 4,160 instructors and 59,594 students.

Andrew D. White, ex-President of Cornell, has presented his private library to that institution.

The *Dartmouth* is said to have the largest circulation of any college paper. viz.: 1,100 per issue.

The salaries of the professors, officers and employes at Michigan University amount to \$148,000 a year.

Harvard's trustees have agreed upon the establishment of an observatory in the Southern hemisphere.

The U. of Pa. is about to send an expedition to Babylon for the purpose of archaeological and literary research.

One hundred and seventy-five, out of three hundred and sixty-five colleges in the United States, publish papers.

Mr. A. S. Barnes the publisher of New York, has given \$50,000 to erect a Y. M. C. A. building at Cornell University.

Great interest is shown at Cornell in Henry George and his theories and a "Henry George Club" has been formed.

Leyden University in Holland is said to be the richest in the world. It possesses real estate which is worth \$4,000,000.

It is said that \$3,000,000 have been subscribed by an American for the purpose of founding a university of learning in China.

West College, where Mr. Cleveland graduated, has become suddenly popular, and can hardly accommodate its students.

Of thirty-two candidates recently examined for the admission to West Point, only nine were judged to be physically sound.

Gov. Foraker, in an address to a body of students said: "I would rather be a sophomore in college than be Governor of Ohio."

Yale is to have a new recitation hall. An unknown friend of the college has given \$125,000 towards it, and a site has been selected.

By the will of the late William Hilton of Boston, Harvard, Amherst and Williams each receive \$50,000 to aid meritorious students in getting an education.

President Eliot said in regard to Cleveland's message that "The views on the tariff question and the reduction of the surplus are sound economically, sagacious politically, and thoroughly patriotic."

At the Massachusetts Institute of Technology, class colors have been chosen, which each class is to keep through its course and to hand over to the incoming class at graduation, thus making the colors a permanent institution.

EXCHANGES.

As once more we look over our exchanges, we find a large number accumulated during the winter, and hardly know where to commence examining them. It would be impossible for a student to do justice to each of a long list of exchanges, even pre-supposing him capable of justly criticising and commending articles that appear in the different college journals. As we make no pretensions to ability in this line, let the criticisms when they appear, or the commendations of that which meets with our approval, be taken in the spirit in which they are given.

Many of our visitors appeared in new dress for Christmas numbers, and some of them evidently went to great pains to make the issue attractive.

The *Xavier* once more donned a neat cover, more in accordance with its uniform, carefully prepared contents.

The *Normal News* presented to its readers a plate of photographs of the teaching force of that institution.

The *Fordham Monthly* has also adopted a new cover, and with its improved outward appearance, it does not disappoint us with its contents. In the holiday number there appears an article "Yuletide Merry making," the evolution of Christmas; a very readable essay, and one which shows considerable research into the customs of different countries regarding that so-called anniversary.

The *Dartmouth* is well worthy of its wide circulation, and presents, aside from the matter which is of interest especially to the students and alumni of Dartmouth, much interesting reading in the form of short stories which in their way offer as much valuable practice to students, as would more practical subjects. An editorial on this same subject in their November number is well worth the attention of our western college journals. "In looking over exchanges we are struck by a marked difference in the character of the literary articles in college papers published in the east and in the west. Speaking generally, the eastern journals fill their columns with light stories fanciful sketches, and little trifles of verse, while our western exchanges give place to more solid articles on historical and industrial subjects, and verse less given to fancy and more to thought. At random we pick up two papers for illustration. Here is the *Tech*. Its literary department contains "A Ghost Story," "A Tale of Ancient Rome," and "Along the Lazy Belt." We next take up the *Round Table*, from Beloit College. The three subjects treated are "Socrates," "What Stanley has done, and can do for Africa," and "Landlordism in America." The former school seems to require more power of imagination, the latter, more study and exact knowledge. Though would not disparage the literary work of our exchanges, the *Dartmouth* is more than content to remain on the side of the fence which our birth place has allotted to us." Is it not a fact that the more inexperienced the writer the greater questions he grapples with? Is it not a poor plan to attempt that which, before we commence we know is beyond our scope? How many readers of a college journal care to read what a boy, of from sixteen to twenty, has to say about "Can the finite grasp the Infinite," or even more terrestrial subjects, such for instance "The effects of socialism on the laboring classes of America?"—none but the boy himself and a few intimate friends.

The *College Student* for January contains a very good article "Nature Worshipers."

The *Messachorean* and *The Palmary* are both new journals which would be improved with fewer silly expressions in their local columns. It is noticeable among our exchanges that the younger journals seem at a loss for local items, and fill the space with flat expressions, which give readers a poor impression of the institution from whence they come.

The *Central Collegian* is especially noticeable for the caustic criticisms of the exchange editor. In the December number he scores the *Index* and *Messenger* for criticisms on an article, "Home Rule for Ireland," which appeared in the *Collegian*, as being prompted by narrow ideas. He is also very desirous of ascertaining the gender of the editors of these papers, judging from the following: "Say, do you people have any names? If so, why don't you let the world know who your editors are? I should like to know their genders. Is the exchange editor a *he* or a *she*? I have been calling 'it' *he*, because I have no way of finding out what 'it' is." Such matter as this, and that which precedes and follows this paragraph referred to, may be excellent practice in invective and sarcasm, but it hardly fulfils our conception of the mission of an exchange column.

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