not sometimes cause them unhappiness. But, if it has its anguish, it has also its blessing—its rich reward; and they who would ignore all literary friendship would rob genius of its greatest source of happiness, and literature of its brightest virtue.

THE MOUNTAINS OF LIFE.*

BY ANDREW SHERWOOD.

'Tis a land far away thro' the deep vaulted sky,
Where the flow'rs and the amaranth bloom;
And its bright sunny palaces gleam on the eye
As we tread thro' the gathering gloom;
'Tis the seraphim's home, 'tis the kingdom of God,
Where the fountains of life have the heavenly sod,
And the ransomed in raiments of splendor have trod,
On the evergreen mountains of life.

'Tis the land where the blest with no sorrow to mar,
Through the green fields of Paradise roam;
While their banners celestial are gleaming afar,
To beckon the traveler home;
And at twilight they stand in their golden array,
Where the sunset is dashing the portals of day,
Till they fade from our gaze, like soft music away,
On the evergreen mountains of life.

'Tis the home of our loved ones who crossed o'er the tide,
When the twilight was gathering cold;
But I know that some day we shall walk by their side,
Down the valleys of sapphire and gold;
For our spirits, unfettered, with seraphs will soar
To the garden of balm that shall fade never more,
And my soul shall know thine on that beautiful shore,
On the evergreen mountains of life.

Far away in the sunset's all-radiant light,
Are the gates of the city sublime;
And its glory oft shines in our visions at night,
As we float down the river of time;
And we dream of the morning, when hand joined in hand,
We shall roam through the world of eternity grand,
For my soul shall know thine in that beautiful land,
On the evergreen mountains of life.

* Published in form of sheet music by Root & Cady.

MILTON'S PROSE WORKS.

The impression which any writing makes upon the mind of the reader is modified by its attendant circumstances. If it is poetry that we are reading, we expect to find in it gems of thought in their holiday dress, and choicest words rich in metaphor rendered doubly attractive by their metrical arrangement. We expect to have our imagination quickened to a vigorous activity, our passions stimulated, and our feelings of enthusiasm wrought to the highest pitch the subject will permit. We expect to have our emotional and spiritual natures raised so as more nearly to grasp ideal perfection, and the soul incited to nobler achievements.

These are among the prominent qualities we seek in poetry, and though we may know but little or nothing of the laws of quantity, versification, or poetic license, we can judge quite correctly of the merits of a poem, as it speaks, or fails to speak the language of the imagination and the passions, of fancy and the will. But if it be prose that we have in hand, we say to the poetic faculties, "stand back!" and call reason to our aid to sit in judgment, weighing the style, the matter, and the truthfulness.

We judge scientific writings by the importance of the instruction contained in them, and by the vigor and accuracy of expression: we judge philosophic writings by the depth and clearness of the thought affirmed, and Belles Lettres by the graceful language used, by the correctness of the views entertained, and by the success of the author in imparting them. We may judge poetry to be good, though it be but imperfect verse, but in estimating the merits of prose, if the mind is unbiased by favor for the author or for the subject of which he writes, we judge the language, the style, the perspicuity, and the general execution with nearly the same rigor as the thought.

With these views of literature, then, that poetry is the language of the sublime and the beautiful, and its object is to move the soul, and that prose is the expression of reason speaking to the intellect, let us make the acquaintance, in the department of prose, of him who stands so eminent as a statesman, a scholar, a poet and a Christian,—the author of "Paradise Lost."
Removed as we are from the times in which Milton lived, we can hardly appreciate the circumstances and feelings which prompted him to his work; but looking from our own standpoint, granting that he wielded a powerful influence, and admiring the religious zeal and stern patriotism that controlled him, we can but regret that the author of "Comus," "L'Allegro," and "Il Penseroso," should have neglected his muse and sought fame in controversial and political writings. Had Milton confined himself to poetry, the great work of his life would have been more complete, and more productions like "Paradise Regained" would have been left to incite to higher life. It is true this opinion differs widely from that advanced by some, who, in their enthusiasm, are so delighted with Milton's prose works, that they almost wish he had written no poetry.

His prose works do indeed abound in good thoughts, for his mind could not think without thinking good thoughts, and yet but few of our graduates have ever read his most celebrated prose works, while a large class of well-read men do not even know that they exist. These considerations, together with the fact that they are obtained with so great difficulty, there being but one edition in the market and that one published in London by Bohn, the collector of antiquated and fossil specimens of literature, form, in themselves, a commentary upon the fitness of Milton's prose works to the present wants of the people more forcible than the words of his most virulent defamers, and so potent that his warmest admirers can not counteract it.

The prose style of poets in general is injured by their inability to free themselves from the decorative parts of language and from the ornamental combinations so abundant in poetry. Their periods are not well rounded; their sentences are complicated; their words are not arranged in what we consider the natural order, and to avoid too loose a style, "they often mount into a sustained and measured prose, which is more odious still, and as bad as being at sea in a calm." Milton is not exempt from these faults common to poets, but, on the contrary, from the fact that he stood so high in their ranks, these faults were all the more powerful when they attached themselves to him.

His sentences are long and complicated in the extreme, sometimes occupying a half page or more; they abound in poetic expressions, and tire with their "cumbrous cargo of words."

Add to this the fact that Milton imitated the construction of the classics, and even wrote many of his works in the Latin language, and we shall realize how much his style is at variance with the spirit of the English language.

Modern controversy is valuable only in so far as it overthrows false positions and exposes sophistry by the use of sound reason and strong argument. With some men rillay and retort passes for sound reason; these might be pleased with Milton's writings, but to the controversialist of to-day, who is accustomed to use strong thought both as the weapon of offence and defence, they seem in many respects trivial.

Milton was a master of sarcasm and the tricks of rhetoric, and these were his strongest weapons. Often whole pages, indeed whole chapters of his works are occupied with aspersions upon the literary and moral character of his opponent, striving to bring the person into ridicule rather than make the subject appear weak by showing its faults.

Word controversy plays a prominent part in his writings, much time being spent in trying to make his opponent appear ridiculous in the use of rillay, or certain expressions of perhaps ambiguous meaning, while he himself uses with no sparing hand such epithets as "impudent," "rogue," "effeminate," "vain-flushy," "mountebank," "juggler," "empty-head," "Dr. Umraticus," "runagate," and "babbler." We look with surprise upon these faults, but are told to attribute them to the style of the times. We can, however, only regret that he did not rise above them, rather than adopt them and make himself conspicuous in their use. From these criticisms it may seem that we find nothing in his writings worthy of praise. This, however, is far from the truth, for there are many passages unsurpassed elsewhere in the sublimity of conception and in the eloquent, powerful manner of expression. His thoughts, in many cases, are eminently practical, and were far in advance of his age. He handled great subjects which ordinary men dare not touch, as if they were but his intellectual commonplaces.

Underneath all these faults there is a bold integrity of character which shows itself in all his works, the platform of which is contained in one of his own sentences: "For who knows not that truth is strong next to the Almighty; she needs no policies nor stratagems, nor licensings to make her victorious." The prose
Some Thoughts on Writing.

works of Milton are left us with their virtues and their imperfections. They are numerous and are rich in knowledge. To those who take delight in the style of the Romans, or in high sounding words and involved sentences; to those who take pleasure in the foibles as well as the virtues of great men, they are useful. But like the great swords and spears, the shields and helmets of the middle ages, which were useful in their time, but are now only fit to adorn the walls of old manor halls, so these have performed their work, and their proper place is upon the shelves of old libraries rather than in the hands of the people.

SOME THOUGHTS ON WRITING.

How much of literature comes into existence sired by necessity! The procrastinating student often finds himself at the eleventh hour "essayless," when the vision of an offended instructor rising up before him, the knowledge within himself, that confidence in him as a trustworthy student is liable to be lost, and other like things goad him to a choice of a subject and to a season of self-torture, as his stupid fancies are stirred up, dragged out, and arrayed in line. It is not well that the duty of writing an exercise should be put off till the last moment, for it supposes a lack of preparation of material. Then, too, carefulness of composition and rhetorical finish are overlooked; the gaining of a desirable style is endangered, and, what is perhaps more important still, subjects of a trifling nature are selected, which can be treated with little exertion of the mind, or, if subjects of a weighty character are prescribed, such as "The Antiquity of Man," or "The Probability of America becoming a Land of Song," under the present system of neglect the probability is, that four loosely written pages of general remarks will lead to the conclusion that man is about six thousand years old, and that there is small probability of America becoming a Land of Song.

So much in depreciation of neglect. On the other hand, the practice we have noted gives a certain quickening of the wits which comes about only when one is in an emergency. If a person is going on a journey by a train which leaves at an appointed hour, he is more apt to be behind time if his leisure is great than if it is small. This practice, too, makes the matter of writing, not so much a thing inspired by one's feelings, as a thing which is in his absolute power, and that can be knocked off at will. This is desirable for all those whose profession is that of writing. The subjects of the day must be treated whether the affluence is on or off, and the importunate demands of the sub-devil for more copy must be immediately met. What need is there, then, for that result of this department of education, which enables a man to marshal his forces at will, to produce his strong reasons, and to laugh at indisposition, fatigue, or whatever party may be found in the conspiracy against the operation of his pen!

The ability to write, like all other appurtenances of the educated man, must be always under orders, and not be humored in its caprices. A man may write at midday as well as at midnight if he will, and he need not be so servile as to run periodically to his pen when the fit is on, and jot down monstrous haste the good things which fancy brings him fearful that she will be gone before he can fully unlage her. Such a habit may be pleasurable to the writer, and may be able to show us as its recommendations some of the rarest gems of poetry, and some of the most brilliant passages of prose writing, but it is unnatural, unreliable, and does not provide for the constant prosecution of the profession of writing. We like the habit of Dickens and Scott, whose pens were slaves, and they themselves were absolute masters. Their immense volumes of unflagging interest speak nothing of obedience to a capricious fancy. The life of Goldsmith furnishes some rare illustrations of this subject. One is especially interesting, in which the landlady followed the angry publisher up the stairs to Goldsmith's room, and arrived just in time to hear the key turn in the lock, then a scuffle, after which came quiet, unbroken except by the scratching of Goldsmith's pen, until evening, when the door was opened and the publisher marched off triumphantly with the just finished manuscript under his arm, himself and his rough procedure having been the muses that inspired it. De Quincy tells us that it was only dire necessity that made him write; Johnson was a Grubstreet hack; Garrick, and Burke, and Addison felt early the gripings of poverty that made them ply their pens in season and out of season; and who knows but that some day, when the sober realities of life are upon us, and we must earn bread or starve, we will thank our stars for this college exercise which taught us a sublime indifference to feeling and a ready command of expression.
A VIEW AND REVIEW OF LITERARY SOCIETIES.

It is not customary to speak plainly on the subject of our own weaknesses. Ordinarily it is better to keep silence about them entirely, or to put on a bold front and speak of them in high-sounding platitudes of commendation, such as are the universal formula for the expression of opinion when we wish to speak much, to say little, and to mean less. It is said that language was made to conceal thought. At least, however this may be, high terms of praise are used to conceal opinions more commonly than any other means. Perhaps there is a general idea prevalent that all weak, formless, flabby things are like bladders, which, by sufficient "blowing," may be filled out and rounded into shape. Observation upon such pretentious concealments of opinion may be made in reading newspaper reports of college commencement exercises, in which programmes will be published containing bills of fare such as have been provided as a steady diet by collegians for their friends and admirers from time immemorial — mental pabulum, which is to the appetite of the mind what bread and butter are to that of the body, in that it feeds every youthful intellect from the earliest school days to the last — and yet all such exercises "do high honor to the young collegians themselves, and to the institution they so favorably represent." Of course the same remarks apply to all public reports of the exercises of literary societies. It is very strange, indeed, that no such exercises were ever yet reported which did not "do great credit to the mental powers of those who participated." An account of some such pleasing exercises of a college literary society is before us as we write. "A pleasure such as one may well look forward to with pleasant anticipation" was "taken out" in listening to essays on the original, striking and thought-bearing themes, "Hope," "Memory," "Education," etc., accompanied by a debate on "The Relative Merits of the Scientific and Classical Courses." This case is mentioned, not as an exceptional case, but as an illustration of a general rule. Is not this a fair sample of the ordinary "Literary Exercises" of college "Literary" societies? Is there not need, then, of some one to speak of our weaknesses, at least in this department, with compassionate severity?

There are times when praise will do more than any thing else towards working improvement, and there are also times when close and severe criticism is the only thing which can be made effectual for that purpose. Praise has been tried often enough in the matter of our so-called "literary exercises." Why should not the question concerning the failings and weakness of our college societies, together with that concerning the best means for improving them and making them worthy of the name, be opened at once for free and general discussion?

How, then, shall we account for the intolerable "staleness," and the other failings in our literary exercises? The most notable truth is, that our societies become mechanical. We meet at just such a regular time, we go through a regular routine of exercises as regular and formal as those of the class rooms. No enthusiastic member of a "society" can retain his enthusiasm long. Enthusiasm is out of place there. The society is a mill. Every member's talents are put into it. They are all ground by the same process. It is impossible for any member to change or to avoid the simplest step. It must be just so for all, and all very soon become very much alike. The mill soon grinds off enthusiasm and life, without which it is impossible to make such exercises either profitable or interesting. The society thus makes those who conduct its exercises uninterested and uninteresting. By furnishing no novelty in its exercises it thereby excludes all interest. Uninterested speakers and readers react upon listeners and the result is inevitable. Matters soon come to such a pass, that, in order to listen with any patience to the exercises of such a society, it is necessary to have at hand "portable ecstacies in pint bottles." Instead of compelling all minds to run in the same rut without any alternative, our literary societies should make it the chief aim in their discipline to drive the minds of members entirely out of all ruts whatsoever, and to keep them out. If this can not be accomplished with some minds by milder processes, it may sometimes be necessary to jolt them out. In some way our societies should teach us to think. They should find some way to cultivate originality. Instead of being like a mill, with its regular process of grinding, they should rather be like a rapidly revolving wheel, with a very powerful centrifugal force, which shall scatter talents about in all directions,—directions determined by the directions from which they strike it. To
societies conducted on our present mechanical system the critic is a needless appendage. He is a part of the mill. Any severity on his part, such as would show him to be an active intelligence, rather than part of a machine—such as would enable him to manage the mill, instead of being run by the same machinery—such as, in other words, would enable him to shame away from the society all efforts which have not received study and care, meets with general displeasure and condemnation. The critic is practically muzzled. He himself, like all the rest, is put into ruts and made to move there.

The question may well be discussed—as it has been to a considerable extent—whether literary societies are not to all more injurious than beneficial—whether they do not confirm all previous bad habits of mind, and lead to a great many new ones. Is there really any sound, reliable, corrective power in them? If not, will any amount of “practice” in them improve the mind? Is there not some way by which a society may itself be the critic and a very severe one at that? Is there not some plan possible, by which societies can subject their members to an effective drill which shall reach each member according to his individual needs, and which shall thus cultivate variety and power in the minds composing it?

In order to cultivate originality of thought, it might be well for a society to have a standing committee, composed of its very best thinkers, to furnish subjects for all productions that shall be offered before it. It might be found effectual to require that every subject to be treated, if selected by individual members, shall first be accepted by the society. Much originality of thought could doubtless be brought out by occasionally offering some consideration or honor for the most original production upon the very stalest subjects that can be selected.

A word in regard to debates. It can hardly be expected that interesting and profitable subjects for discussion can be furnished for any great length of time if debates occur as often as every week. Whenever this is attempted, and it is almost always attempted, all questions of interest are discussed and rediscussed until they are as stale and uninteresting and unprofitable as possible. To avoid this, different questions are introduced, which are made to order, to supply the demand. They are never of any interest to any body, and they are very often too silly to repeat.

Music or Arithmetic.

What result is inevitable from this state of things? Can debates possibly be made interesting as a regular society exercise? To make the question still more general on similar grounds, can any regular settled programme of exercises long remain interesting? What is true of the debates is equally true of all other exercises if too often repeated. In our own view, literary societies should be places of profitable relaxation. Variety to the greatest practicable extent should be their constant aim. Enthusiasm with consequent labor and care is only possible with great variety in the exercises as a condition. But if this were not the case it would be a sufficient argument for a constant variety, that it is desirable to train the mental faculties in every direction as far as possible. To us, a regular programme of literary exercises embodied in the constitution of any society, is a sufficient guarantee that that society will not long maintain any genuine interest among its members. We believe the only true way is to throw aside formal programmes entirely, and, as far as possible, to arrange a different programme for each meeting, by all means avoiding a too frequent occurrence of debates. Occasionally it would be desirable to meet without any programme of exercises, and trust to the inspiration of the occasion for making a meeting profitable and interesting. An extemporaneous talent is a very desirable one.

We call earnestly for suggestions and thoughts upon the most interesting and most profitable method of conducting college literary societies. There is too evidently a great need of change and reform in them. We hope to see articles upon the subject in some of the college periodicals of the country.

MUSIC OR ARITHMETIC.

Many of our young men and women must, at the outset of life, choose an avocation in which they can earn a livelihood, free from absolute dependence upon others. They are not willing to live hereditary paupers, as many do in England. Yet, with a very honorable object in view, the course which many select is far from being the wise one. Parents, in moderate circumstances, wish to give their children such an education as will enable them to be of use to others, and to gain, from the beginning of life, a
respectable living and position. If the person be one whose tastes, talents, or health are especially fitted for the occupation of a teacher, then these two branches present themselves very prominently—Music and Arithmetic: "Which shall I teach?" is the query.

A gentleman who has been eminently successful and honored as a banker and business man, says he chose a mercantile life instead of the legal profession, because he was determined not to be mediocre in any thing he undertook. If every one had the same wise consideration, we should have fewer blunders and failures. No one should accept or reject a position in life without reference to the probabilities of success and happiness in fulfilling its duties.

It is apparent that there are already far more music teachers than can expect to find employment. The great numbers of advertisements in our daily papers for more pupils, are sufficient evidence that already too many are seeking employment of this kind. The demand for teachers of mere accomplishments is limited. It is true that enormous charges are made by the "professors," who give instruction on the piano; but, from the nature of the case, it is not reasonable to expect that, on the whole, they can be so well or so surely paid as the teachers in the public schools. A master of music can give instruction to but one person at a time, and to only a very few during one day, while a majority of these are driven away by the necessary expense, or drop off when they have acquired what is called a sufficient knowledge of the art. Thus a precarious livelihood, and a continual change of home and patrons is inevitable. Further than this, it is undeniable that the Europeans are hopelessly in advance of us in the department of music.

If a music teacher can not hope to have the highest success in music, it is better to leave the whole matter of teaching it alone. But do some, echoing the "On to Richmond" cry, say "Let us then cultivate our talents in this direction?" Remember the wolf's challenge to the lion: "What if the lion should gain the victory?"

We may seem to decry the cultivation of musical taste. Far from it. But to make it the end and aim of existence to play well, while no share is taken in the more difficult problems of being, we do declare to be a perverted view of life. The art of music is a source of pleasure in society, and as an acquirement of those who have the requisite taste, means, and leisure, is in every way worthy of attention. We need more music and better, both vocal and instrumental, but we ought not to gain it at the expense of higher interests. Within proper limits, music is elevating and purifying, but let it have its legitimate boundaries. But some are apparently willing to drum and fiddle away all the precious hours of their lives; for with all the drudgery of training musical tyros there are mingled many bewitching strains, and an indescribable charm makes the musician almost a monomaniac. By this the woman is frequently unfitted for the cares of domestic life, and the man unnerved for every occupation except his chosen pursuit. This is a peculiar temptation, a necessary evil of following the profession of teaching music.

Some music teachers are beguiled into their profession by the fascinations of the harmonies and sensual delights of sound, probably quite as many by a fancied life of indolence and ease. But it should not be our aim merely to make a living, and that with pleasant surroundings. We should have an ambition to leave a lasting impression, it may be, for good. Only with great pains and much expense, can we hope to be able to instruct others. Why, then, not exert our energies to produce the most permanent and beneficial results.

The teacher in the common school has the same labor as the music teacher, but with more ample compensation. His pupils continue with him during several years. While only a few favored ones can cultivate musical skill, all the children can and must learn arithmetic, grammar, geography, reading and writing. In these latter branches many can be instructed by the same person, whose labor thus becomes of wide-spread usefulness, and he draws support from a wide field. One who is an efficient teacher can retain the same position as long as he desires it. More than this, one who has ability and energy need not remain over the primary grades, but will soon command a better position. Does any one say that at present many applications to teach in our public schools are refused? It is only because the unfortunate applicants are unable to pass a proper examination. There is always plenty of room up higher. But these same persons might have good wages in a location suited to their capacities. District schools in the country are often "kept" by persons...
whose ability to teach is of a much lower order than that of those who are refused by the city board of examiners. The teacher in the day-school can impress valuable lessons upon the heart and mind of his pupil as no other person can. He can win the affections of the youth, and, as many Christian teachers are doing, can lead them in the ways of wisdom, earthly and divine. It is not strange that the Romanists dread to have their children under the influence of public schools.

There are many reflex advantages accruing to the day-school teacher of which the other class is totally deprived. The cultivation and discipline of one’s mental powers of are great moment. It may safely be left to the experienced judgment of any community, which class of teachers is more apt to cultivate a knowledge of general literature and solid information. While the public school teacher is sure to develop his mind, the regular and liberal remuneration for his services will enable him to cultivate the art of music as a recreation for his leisure hours. The tedium of the school-room and the monotony of the routine of his duties can be enlivened by application of the mind to subjects of useful thought and the acquirement of desirable accomplishments. The advantages of the public school teacher are growing. He is becoming more respected and more widely useful. While the competitors among those who teach music are scarcely worthy of mention, the names of such as Wayland, Mann and White are everywhere recognized and honored. Pecuniarily, socially, and in every way it is more desirable to teach the common branches than music. Will there not be found in the future an increasing number of gifted persons who will be ready to devote themselves to a profession which offers so many advantages, but which holds out its best prizes only to those who are determined to drill and study in order to fit themselves for earnest work? C. E. H.

The twenty-second of February is at hand. The good time we had a year ago is still fresh in the memory of all. By a motion carried at the close of the supper of the year, the Faculty are called upon to furnish the entertainment for this year. Of course they will not allow themselves to be surpassed by the students.

COLLEGE NEWS.

There are eleven hundred students in attendance at Michigan University this year. The different college publications of this institution engage as editors about thirty-five of its students. Two new courses of study.—Pharmacy and Mechanical Engineering—have been authorized by its Board of Regents. In the list of distinguished men who have spoken before its Lecture Association this winter, appear the names of Mr. Murdoch, Prof. Upson, Dr. Hayes, Father Hecker, Theodore Tilton and others.

The Lawrence Collegian states that Prof. Cumlock is making arrangements to teach Elocution a part of each year in Lawrence University. We believe him to be a true gentleman, and from the little we know of his skill in teaching in his department, we think the students there are fortunate in securing his services.

Human nature yearns for the companionship of those in like circumstances, even though they be companions in misery. It is with some feelings of pleasure, therefore, that we learn from the Collegian that the “Matrimonial Epidemic” is also raging there. From the number of cases recorded in the copy before us, we conclude that the disease must have become chronic with them. Doubtless the atmosphere of a mixed school is especially fitted for increasing, rather than for diminishing such a plague. This University numbers about two hundred and seventy-five students, a little over one-third of whom are ladies.

There hundred female graduates of medical schools are now in good practice in the United States.

VASSAR FEMALE COLLEGE has three hundred and forty students.

A LITERARY and scientific course of lectures to ladies is to be commenced next month in London. The professors of University College have been secured to deliver them.

HARVARD COLLEGE has received a bequest of $10,000 as the foundation of a fellowship; this is the first one ever founded in America.

REV. JOHN P. GULLIVER is the new President of Knox College. PROF. TAPPAN, of Athens University, has been elected President of Kenyon College, and has accepted.
REV. Dr. Brooks, late editor of the National Baptist, has entered upon his duties as President of the Kalamazoo College, Michigan.

Prof. Mahan is to be President of the School of Architecture and Engineering at Dartmouth.

Rev. F. P. Brown, Yale '52, has been elected Professor of Greek in the University of North Carolina.

Steps are being taken to found a seminary at Mount Pleasant, Iowa, to be called Whittier College.

LOCAL.

SPECIAL.—In reviewing the circumstances which have conspired to delay the appearance of this number of our INDEX, we are reminded of the tale of "the dog that worried the cat that caught the rat that ate the malt," etc. A rehearsal of these circumstances would be uninteresting to our readers, therefore suffice it to say that the matter for the present number was in the hands of the printers in due time, but circumstances, out of their control, extending away back to Boston and we know not how much further, prevented the prompt execution of the work.

Asking indulgence for the present, we promise promptness in the future.

ELECTIONS.—The society elections for the present term show the following results:

CHRISTIAN ASSOCIATION.
President—H. K. Hopps.
Vice-President—H. K. Shumaker.
Secretary—E. Morgan.
Librarian—E. Morgan.

STUDENTS' ASSOCIATION.
President—A. H. Hawkins.
Vice-President—C. A. Barker.
Secretary—E. Morgan.
Treasurer—C. C. Smith.

ATHENAEUM.
President—J. M. Coon.
Vice-President—C. C. Smith.
Secretary—J. P. Thoms.
Treasurer—E. Morgan.
Critic—C. R. Henderson.

TRI KAPPA.
President—D. Dewolf.
Vice-President—W. E. Bosworth.
Secretary—E. H. Pratt.
Treasurer—G. Nead.
Critic—T. B. Pry.

Quite a lengthy report by Professor Safford, director of Dearborn Observatory, to Hon. J. Y. Seammon, President of the Chicago Astronomical Society, has lately been published in the daily papers. As the Professor made so little noise while keeping his nightly vigils, many had begun to think that he was doing little or nothing, and that, from a first-class astronomer, he was fast degenerating into a first-class showman. However by his report he has vindicated himself from all such slanders, and shown that he is awake and at work in his department while others sleep. He promises still more for the future. His special work, as noticed in a previous number, will be to catalogue all stars to the ninth magnitude, inclusive, between thirty-five and forty degrees. This will require about twenty thousand observations, and is to be accomplished in from six to eight years. He hopes, besides this, to accomplish much work with the large equatorial telescope.

The meridian circle has now been set up so that it can be used, but its final adjustments are not yet made.

The college Argus of Middletown, Conn., for January 14th has the following:

"The new telescope has been received, and the workmen are busily engaged in mounting it. In an early issue we hope to give a full account of this fine instrument. Harvard is the only college in this country that has a better telescope than ours."

We are glad to hear that our Middletown friends have succeeded in securing a telescope "second to that of Harvard" in size. Judging from what appears in another part of the paper we should think that it had long been needed. The small and poor instrument they have had hitherto, it would seem, has acted as a damper on their zeal to gain the latest astronomical news, and so we are not surprised to find that they are slightly behind the times in this department. While congratulating them upon having procured so fine an instrument, we would remind them that there is at Chicago in Dearborn Observatory a telescope still larger than the one at Cambridge, the diameter of its object-glass being eighteen and a half inches. We hope that, as they now have such a superior optical instrument, they will be able to see the point; but if not, and will come to Chicago, we shall be glad to show it to them.

GEOLOGICAL.—It has long been felt that something more than simply a text-book and teacher is needed in order to make geology take the place in the estimation of students which it deserves.
Local.

With these alone, in the short space of time devoted to the study, students can master neither the detail nor the general principles of the science while the attempt to do both proves fatal to all interest and enthusiasm in the subject. We are glad therefore that our faculty and trustees feeling that such a difficulty exists here, adopted means to remove it. Col. Foster, President of the American Association for the Advancement of Science, is now delivering a series of weekly lectures to the senior and junior classes of our institution upon Geology and Physical Geography. These lectures are not merely a temporary arrangement but are hereafter to constitute an important feature in the college course of study and the students will be examined upon them at the close of the year as upon their other studies. Col. Foster is a man well fitted to perform the duties he has undertaken. As a geologist he is undoubtedly the best one in the west, and to Agassiz alone, of those in the east, does he yield the palm. He has made the geology and physical geography of this country, and particularly of the west, his special study, and on this account is peculiarly fitted to instruct western men. His book on The Physical Geography of the Mississippi Valley, which, besides being a general treatise on the subject, embraces the results of his more recent investigations, we understand is now in press, and will shortly be given to the public. We consider that students of this University are highly favored in being permitted to reap the benefits of Col. Foster's instruction in this important branch, and especially so as he has expressed his willingness to visit with his class such places as it shall seem best to visit for the purpose of gaining actual practice in the field.

Junior Exhibition.—At the request of the junior class, their exhibition, which was to have been held at the close of the present term, is postponed till commencement week. This has been the practice of former years, and as a consequence, every evening of commencement week has been occupied, giving no chance for class or society reunions, and crowding the public exercises far more than is desirable. Our students have never appeared before the public without commanding a good audience, and the Juniors need not fear that they would be compelled to address empty seats, should they appear during the year, when their efforts could be better appreciated than when their exercise forms but one of a crowded series.

We learn that our old friend A. B. Hostetter, of the class of '68, is teaching in Forest Hill Seminary, Glendale, Ohio.

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Meeting: While a few minutes favor you with the whole theory of Phrenology, and an application to the head mentioned and all other heads, till you feel like applying something else than theory to your entertainer's head.

Then there is the amateur geologist, who will describe with all the ardor and enthusiasm imaginable, and with painful particularity, the latest addition to his newly formed "cabinet," apparently as devoid of sense as the "crazy Dutchman hunting bird's nests over in the woods." Yet, if he would become another Agassiz, who would not consent to be bored for half an hour occasionally for his encouragement and the promotion of Vol. I.—No. 3.
Local.

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Vol. I.—MARCH, 1869.—No. III.

EDITORS:

E. F. STEARNS.
D. DEWOLF.

W. WHITNEY.
Z. D. SCOTT.

THE WRONG REDRESSED.

A MAN with a hobby is a terrible thing to some people, and it may be allowed without serious harm, that many times an encounter with one of these well-disposed but sometimes misguided mortals is not the most agreeable thing in the world. We readily admit that it is not pleasant to meet a man with the absolute certainty that, the weather once safely disposed of, you will be compelled to listen to a recital of the contents of the last Socrates, or a dissertation on the venality and corruption of public men. There is A., who never hears the subject of Geology mentioned without beginning at once to refute all the arguments in favor of man’s great antiquity, and if you chance to say in B.’s hearing, “What a fine head that man carries,” he will surely favor you with the whole theory of Phrenology, and an application to the head mentioned and all other heads, till you feel like applying something else to theory to your entertainer’s head.

Then there is the amateur geologist, who will describe with all the ardor and enthusiasm imaginable, and with painful particularity, the latest addition to his newly formed cabinet,” apparently as devoid of sense as the “crazy Dutchman hunting bird-nests over in the woods.” Yet, if he would become another Agassiz, who would not consent to be bored for half an hour occasionally for his encouragement and the promotion of

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science? After all, have not these hobby-riders, these men of one idea, been abused too long as utter nuisances of no value to mankind? And does not justice demand that the other side of the case be occasionally presented? It is not intended within the limited space of this modest article, to give the subject the thorough ventilation it deserves, but simply to relate a few important facts apparently forgotten by many.

The first redeeming characteristic in these men is, that they seem to possess at least one idea that was originated or has been more fully developed by them. The great mass of men never show that they have one idea of any value to them—that is deemed important—worthy of study and care. All they own comes at second-hand, and is such a conglomerate of ill-assorted and worse digested thoughts, facts, and whimsical fancies, as to be of no benefit to themselves or others. They never make a remark but you instinctively feel that, in your reading or conversation, you have met the same thing clothed in better language, and more gracefully expressed. Their philosophy is simply a dull and profitless rhapsody of what thinking men have made attractive. Their views on finance, and the thousand practical questions of the day, you instantly recognize as borrowed. In short, the reason that their company and conversation is so stale, flat, and unprofitable is, that they have no individuality. They are completely made up of selections of other and better men, with just enough of each to indicate the source, and not enough of any one to be of any positive use or benefit. They dabble in literature and science, philosophy and politics, with no end or aim well-marked and sharply defined, but simply to be like other men.

Now, in just so far as the "man of one idea" fairly earns that title, he is the direct opposite to all this. True, his thoughts will not all be original, few need necessarily be so. He will need to read much and study more, yet, being a real enthusiast, he will have gone over all that relates to his hobby, and can furnish some facts not generally known, some anecdote, it may be, to enliven the occasion and interest his hearers. There is not the same beaten track, the same old stereotyped phrases and worn out arguments with the inevitable illustrations. Paradoxical as it may seem, the man with one idea can avoid this. Supported by a comprehensive knowledge of his theme he can vary his style and

matter at will, and need be restrained by no fear of getting beyond his depth or treading on unknown ground. In addition there is in the freshness and vigor of originality, a charm not to be acquired by the mere retailer of the thoughts of other men.

The second element worthy of notice in the character of this abused class is the earnestness with which they give themselves up to their chosen work. When there is in the world so much of feigned interest and pretended zeal, even in behalf of a good cause, genuine unselfish devotion is calculated to win the attention and regard of the people, though the cause be bad. On this ground alone can we account for the strange phenomenon of a body of persons applauding one whose teachings they know to be false. They transfer to the cause he pleads all the excellences that by right belong only to his style of pleading.

Again, however unpleasant it may be to have a man forever harping on a single note, never for a moment forgetting that his "mission" is to proclaim a certain truth and seek its acknowledgment and enforcement, still, by the parable of the unjust judge, we learn that perseverance is often the only means of attaining our object. And who excels the enthusiast in the faithfulness and dogged pertinacity with which he labors for the accomplishment of a desired end? No rebuff, no scorn or ridicule will cool his ardor or dampen his zeal, and no contempt can swerve him from the path marked out. Though friends may be estranged at what they term his perseverance in folly, he is unmoved. Though newspaper critics and penny-a-liners discharge at him their penny pop-guns, and hurl their all-powerful bolts of terrible sarcasm, they do but serve his end, by keeping fresh in the minds of the people what he is working for.

In these three respects, then, in originality, earnestness, and perseverance do men of one idea seem worthy of praise and imitation, and in considering what has been achieved in the world, those who have not examined the subject will be surprised to find what a large proportion of the world's progress and advancement has been due to these enthusiasts. Their influence has been felt from the earliest times, in all countries, among every race of men. To write their history would be to give a full account of the rise and growth of all the arts and sciences, and mark the progress of mankind in philosophy, civilization and religion.

Finally, then, to sum up briefly the results of all our cogitations
on this most fruitful theme, "men of one idea" are abused mostly by those who have none and are jealous of rivalry; and instead of condemning them as fit subjects for sport and ridicule, let us remember that it is only through such men, inspired by original thought and led on by perseverance and unflagging zeal and earnestness, that any material improvement is possible.

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THE NEW ERA.

It has been here. Chicago has seen the diseased and deformed curiosity. Our people, men and women, have flocked to the show and witnessed the display of woman in her latest and most coveted role. Some went and came away with the seeds of the disease planted in their susceptible natures; others went, and returned sadder and wiser than they went; saddened to see how infatuation and demagoguism lower noble characters; wiser, in that they saw the sandy foundation upon which great excitements are sometimes built when printer's ink lends its aid.

In the administration of domestic government it often occurs, that a child can be made so sick of some project by being shown its absurdity, as never again to care for it. Again a simple refusal may accomplish the desired result, while in still other cases all the powers of ridicule, argument, and force are necessary to compel even an unwilling obedience. "Tis said, "Men (and women, too) are but children of a larger growth," and the same influences which control the small children control the larger ones. Of these children's projects, and these phases of children's government we have been reminded in considering the Sorosis. Many thought, when the project was first put afloat upon the world—when the Revolution first declared its platform, to drive it to oblivion and make its projectors hang their heads in shame by showing its ridiculousness. Hence pen pictures of female generals and female armies, female presidents and female cabinets, congress women and police women, demagogue women with masculine voices, and henpecked husbands with infants in their arms were frequent, and the batteries of sarcasm were opened with all their force. These were of no use. The leaders like nothing better than opposition, and sarcasm is their favorite weapon of argument. The time for ridiculing is past. Too many persons, who in other matters challenge respect, have espoused this cause to allow us to ignore it or pass it by with a sneer. The arguments adduced in favor of female suffrage when presented must be overthrown, or all opposition must yield and join the ranks of the revolution.

The subject, though not so old as "the divine right of kings," nor so new as the "velocipede mania," has yet been before the public long enough to have what of argument there may be on either side adduced and its strength tested. To attempt a complete review of the movement, or to embody the arguments of either side, would be impracticable and perhaps uninteresting, but the convention of February 11th and 12th was suggestive of some thoughts which it would be well to weigh.

Turning again to the nursery for illustration, we often see children spoiled by flattery or undue attention paid to their smart performances; continued applause leads them to think that every thing they do must be precocious, and to make continued efforts to gain attention. It would be well if this weakness passed away with the measles and other childish diseases, but it does not, and we continually see spoiled children of mature growth. As authors who have hit upon some key-note and written a worthy book, relying on their former success, continue to write books and bore the public; as warriors who, acting under the inspiration of recklessness or perhaps of bravery, have faced death and come out unscathed, make themselves the centers of idle, gaping crowds, while they rehearse their own valor; so those who have in time past come upon some great truth and had the pertinacity to stick to it till they gained the name of reformers, still cling to the old truth already enforced, or become infatuated with the idea that they were born to be reformers and that whatever they undertake is a reform. Thus it seems to be with the leaders of the New Era. Slavery was the grand war-horse they rode even till the enemy yielded. Temperance and fashion are the hobbies they have rocked upon, and now, with the ponderous word "Reform" upon their banners, they have mounted another hobby, even "women's suffrage," and are rocking vigorously, thinking surely they will win the race. Such are the leaders; women who have been efficient in some spheres and think therefore they can be in all; women who no longer
The New Era.

have household duties to attract them or who have never been so fortunate as to be thus attracted; women who know but little of the Christianizing influence of the prayer-meeting; women who seem to forget their fathers, brothers and sons in their own desire for fame, and who seek to ride to glory with the plea of elevating their downtrodden sex; women whom a little honor has made mad. What could be expected from these? Moderation, reason or argument? Surely none of these! Nothing more than we saw!

In presenting the question of universal suffrage there is a wonderful lack of logical reasoning among the friends of the measure. The outposts which they attempt to fortify and with which they hope to be successful are woman's social and financial wrongs. When driven from these, the citadel into which they retreat and rally for new charges is the inalienable right to vote. But this citadel is only a myth. The right to vote is not inalienable. Do those who thus claim this right understand the terms they use? Do they mean that the right to vote is such that no one has the right or power to deprive himself or to be deprived of it except by crime? for such is the meaning of inalienable. Or do they reason by analogy, saying: "Men vote; we have the inalienable right to do everything that men do, therefore, we have the inalienable right to vote." But hold: men have not the inalienable right to vote, and no such course of argument can give it to women. Men can of their own free-will resign the privilege and still maintain their manhood. They can do this in their own country or by becoming alien to their country. All the arguments to prove this so-called right of women, can apply with equal fitness to minors or foreigners holding taxable property in this country. "Taxation without representation" was the watchword which railed the colonists of the old Revolution, and with lugubrious men the heralds of the new revolution prostitute this same watchword to their own use. They are not taxed without representation. No rights pertain to a woman's farm or house or bonds or jewels which do not pertain to a man's farm which may join hers, or to the bond which may be next in number to her own, or to jewels which came from the same case. The property of both has the same interest, and therefore, when the man enacts laws which tax his own property, the rights and interests of his female neighbor are represented.

The New Era.

The wrongs of the sex are paraded with vehemence if not logic. It is said that women do not receive just compensation for their work; that the places which could be occupied by women are already filled by men; that women do not learn trades, and that public sentiment is against female labor. We acknowledge the truth of these complaints, and truly deplore the condition of things, but how is the ballot to remedy the evil? Are we to have laws which shall prescribe wages; laws which shall dictate to us whom we shall employ; laws which shall compel our sisters (and others' sisters, too), to become milliners or shoemakers? Are we to have legislation which shall prescribe public sentiment and thus our thoughts?

But pity for man's fallen condition is the next plea. Perhaps man is fallen so low that only woman's legislation will save him. If such is his case, however, it seems hopeless. But why do not our mothers and sisters see this our fallen state rather than a few spinsters and ambitious women?

When women vote, every ballot, they say, shall be a bullet in Bacchus' hide, and can he stand so many wounds? For answer, go to Maine, go to any state or town and consult the legislation made against intemperance and then count the groggeries and breweries within the limits of that legislation. The answer will be direct and positive.

Our nation is corrupt, and we are told that when the pure nature of woman shall be introduced into the body politic all will be changed, elevated, purified. The practical question comes, "Will this be so?" The low class of male population and the power they have to defeat wholesome laws is already alarming to honest men; but when the ten thousand women of Chicago who blush not at shamelessness, whose interests are all opposed to right, when these, together with thousands more who hold their character as being valuable only till the sacrifice shall yield some satisfaction of pride or glory, shall wield their seductive influence on the side of wrong, there are not enough upright women in the city who will enter upon the work and counterbalance the effect. Pure women shrink from such work and are driven from the field by cunning and terribly depraved men whose very want of pure principle and whose wily character make them equal to twice their number of virtuous women. But even if virtue should come out victorious, the stain of sin which a
political campaign would bring, no legislation could wash away. Furthermore, the trickery and wire-pulling displayed in the holding of these women's conventions by the very leaders themselves,—so pure minded and free from ambitious motives,—furnishes sufficient answer to make honest men and women consider well, whether the present political fires can be quenched by heaping tinder upon them.

"The claims of infants" are such that a sense of propriety often forbids their consideration, and yet the bearing which these claims have upon the question of woman's suffrage is of pre-eminent importance. The old New England homesteads are passing into the hands of foreigners because the race of New England yoemen is yielding to fashion, and its ranks are thinning. It will do for spinsters and women whose heads are turned with a little honor to glide over this question blushing crimson at its mention; but when corruption, such as can exist only where woman is a party, shall distract our government, the plea of delicacy will not stand. We, however, yield to the popular verdict, but commend the subject to the careful thought of Christian mothers.

Church and state should not have visible connection, neither should they be antagonistic to each other, and yet where they are not connected, observation warrants the conclusion that according as politics is engaged in, the church is neglected. True, there are a few noble exceptions, but these only prove the rule. The church now looks to woman for a great deal of its support, and to her noble endeavors to carry out its work. The church furnishes a field in which all, men and women, may distinguish themselves, a field for the display of talents and philanthropic work. The character of woman is better adapted to the work of the church than of the state. She can win souls to the Saviour better than marshal contending forces or trace the mazes of diplomacy. We would not entirely yield the Christian work into her hands, but, on the other hand, shall she who was "last at the Cross and first at the Tomb," be led by ambitious persons, who take pride in personal rather than Christian philanthropy, to neglect the field of labor already larger than she can occupy, and to divide her energies, all of which are demanded in one direction, with another interest, and that a lower one?

In the presentation of the cause of female suffrage every trial of woman is multiplied, and the heinousness of man's every fault is magnified. Woman is the pitiable pampered slave, and man a tyrant. The virtues of woman are paraded to offset the vices of man, and indeed the balance looks bad. But how would it be if the order should be reversed? The eulogies pronounced upon women February 11th and 12th, and the taunts and reproaches cast upon man were indeed suggestive. There is nothing more poisonous than flattery. Excessive praise is dangerous to the best balanced minds, and pernicious in its influence. Even women can not stand so much encomium without being injured. But how many women really believe all that is said against men? How many believe that they have more, and better principle; that they are less corruptible, more sagacious and wise; in short, have more confidence in themselves than in their fathers and brothers and sons?

Those who have never enjoyed the relations of sister and brother, or never valued those of daughter and father, and never honored or have entirely shunned those of wife and husband may sit down in their lonely room to commune with their lonely spirits, and charge man with the loneliness. But true women, while they feel their own equality, do not declaim against man, but, uniting their burdens to his, acknowledge his physical and political supremacy.

Demagogue women clamor for more influence for their sex, but before more influence is granted let us have the guarantee that it will be used. Woman now holds in her hand influences which, if she will use them, are potent for good. But who ever knew of a man's vote being influenced by his lady love, his sister or even his mother? If so vital an interest is felt in the political events of the times that woman is ready to break in upon the family order, to bid defiance to divine teaching, to allow political ambition to rival Christian love, to leave the church to the guidance of the weak minded, and to unsex the race, if she is willing to do all this, in the name of reason why does she not use the influence she already has?
AMERICANISMS.

The derivation of some of our common terms is often hidden. Words full of meaning to us seem nevertheless to have nothing in themselves which should make them so expressive. Sometimes, however, their true power will be found in their sound, which, upon examination will be found to correspond in a measure with the action or the thing expressed. But perhaps more often it is the very awkwardness of the word, or the very mystery connected with its meaning, which at present gives it its force. Most of these words were not at first adopted for these reasons, but connected with them is some story or some practice which they commemorate. They are, then, relics containing whole histories in themselves. From this they gained their power, and, although the history contained in them is now in most cases concealed, and thus their progressive force is gone, yet they have gained such a place in our vocabulary that it will be long before they can be stricken out.

About the year 1835 a black-leg by the name of Borghese did a large business in the way of supplying the West and South-west with counterfeit bills and bills on fictitious banks. His name being passed from mouth to mouth was soon corrupted into Bogus, and his bills were called by his own name bogus currency. The report of so great a fraud spread over the whole country, and the term bogus soon became a name for any counterfeit.

The term Wild-Cat, used to denote unsound banking institutions, has a somewhat similar origin. A bank in Michigan had a large vignette on its notes representing a wild-cat. This bank failed while its notes for a large amount were still in circulation. These notes were afterwards called wild-cat money and the bank issuing them the wild-cat bank. Of course other banks were soon compelled to stop payment on account of the want of confidence in them, and the term wild-cat was applied to all such without distinction, and as such a general term it has descended to us.

The origin of Brother Jonathan as an appellation for America, is given in a number of the Norwich Courrier. A gentlemen, who was an active participator in the scenes of the Revolution, related the story, which is as follows, to the editor of that paper:

"When General Washington, after being appointed commander of the army of the Revolutionary War, came to Massachusetts to organize it, and to make preparations for the defence of the country, he found a great want of ammunition and other means necessary to meet the powerful foe he had to contend with, and great difficulty to obtain them. If attacked in such a condition, the cause at once might be hopeless. On one occasion, at that anxious period, a consultation of the officers and others was had, when it seemed no way could be devised to make such preparation as was necessary. His Excellency Jonathan Trumbull, the elder, was then governor of the State of Connecticut, on whose judgment and aid the General placed the greatest reliance, and remarked: 'We must consult Brother Jonathan on the subject.' The General did so, and the Governor was successful in supplying many of the wants of the army. When difficulties afterwards arose and the army was spread over the country, it became a by-word, We must consult Brother Jonathan. The term Yankee is still applied to a portion, but Brother Jonathan has now become a designation of the whole country, as John Bull has for England.

"Brother Jonathan" naturally reminds us of his favorite and characteristic song, Yankee Doodle. Numerous stories are afloat concerning the real origin of this name, as well as of the tune which bears it. The whole matter seems shrouded in oblivion, and its author will probably only be known by his production.

It is said that the song was first composed by the British during the Revolutionary War as a take off upon the Yankees, and that the latter, taking the joke good-naturedly, immediately adopted the song as a national air. If this story is true, we should be glad to give our forefathers due honor for their independence in adopting as their pride what was written for their shame, but to us it seems very improbable. The air of the song has been traced back in England to the time of Charles I., and probably the song is nearly as venerable with age as the air to which it is sung. More than this, the air seems to belong to numerous countries, so that it is impossible even to name its fatherland. While it is said to be identical with one sung by the agricultural laborers in the Netherlands, Kossuth and his fellow Hungarians when in this
country, recognized it as one of their own native airs and, more recently, Mr. Buckingham Smith, at one time Secretary of Legation at Madrid, declares it to be the ancient sword dance of the Biscayans.

The word *Proxy* seems to be a product of some of our Rhode Island friends. They have thus certainly, though perhaps unwittingly, made quite an addition to our language. With them the word *prove* means the list of candidates at election presented to the people. By a law of the colony of Providence Plantations, passed in the year 1647, the General Assembly was appointed to be holden annually, "if wind and weather hindered not, at which the general officers of the colony were to be chosen." This clause made it convenient for many to stay at home, especially as they could send their votes for the officers by others, and this was called voting by *proxy*.

Thus far we have looked at words which at most are but Americanisms. We will now look at a few others, which are quite as expressive, but which have not the same good standing in refined society.

The Sweet Gum tree is very tall, slim, and smooth, and is void of branches except at the top, which is a place of perfect security for any animal expert enough to reach it. When opossums and raccoons are pursued they will flee to this tree for refuge in preference to any other, and, as they are hunted in the night, when they have reached the top they are, of course, hidden from the sight of the hunter. This is called "coming the gum game."

Wheeler's History of North Carolina gives the following as the origin of the phrase "talking for buncombe." "Several years ago, in Congress, the member from this district arose to address the house, without any extraordinary powers, in manner or matter, to interest the audience. Many members left the hall. Very naively he told those who remained that they might go too; he should speak for some time, but he was only talking for buncombe." Mr. Saxe, in his poem on "Progress," says:

"Here, would-be Tullys pompously parade
Their timid tropes for simple buncombe made;
Full on the chair their chilling torrent shower,
And work their word-pumps through the allotted hour.
Come on, ye stumpt men eloquent, in never-ending stream,
Let office be your glorious goal, and buncombe be your theme;
The vast and vaulted capitol shall echo to your jaws,
And universal Yankeedom shall shout in your applause."

Our last shall be the "Soedolger." This word is probably a perversion in spelling and pronunciation of doxology, a stanza sung at the close of religious exercises, and as a signal of dismissal. Hence, a soedolger is a conclusive argument, a settler, and figuratively, in a contest, a heavy blow which shall bring it to a close.

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**THE ANTIQUITY OF MAN.**

In the Divine library there are two volumes: the book of Nature, and the book of Revelation. Once granted that an omniscient and virtuous God is creator and author of both, it is folly to try to bring one in opposition to the other.

Man is to be the interpreter of these books. To these works he must come to trace his ancestry, to explain the phenomena of matter, and to understand the laws which govern the universe. The scientists have devoted themselves to the interpretation of the book of Nature. On the other hand, the theologians have devoted their lives to the interpretation of the book of Revelation. If these men be true to their trust, they will work hand in hand for the accomplishment of the same great object—the setting forth of the Divine will. The time has come when they should cease to be arrayed in hostility, dismount their hobbies, and search for truth.

Among the scientists, Sir Charles Lyell stands prominent. He is not one of those who deny the authority of the Bible, or combat it, but one who simply ignores it, and announces his conclusions without regard to their tendency for or against revelation. But is such a position tenable even by a man of science? So far as science confines herself to the discovery, investigation, and arrangement of facts, it is well, and she need not trouble herself regarding conflicting opinions. So soon as she steps aside, and begins to draw inferences and to dogmatize, she is not at liberty to state as facts or probabilities doctrines which are directly opposed to generally received opinions, without either attempting to refute them, or even alluding to them. Science must aim at unity and harmony of truth. She must omit no evidence, but act the part of a just judge.

Sir C. Lyell is now an old man, and his opinions still partake
of the synthetic period of the science, when a few facts justified a theory, and a thousand years were of small account in a conclusion. We have now arrived at the analytic period of science, when facts must be reduced to a certainty, form and order. To-day no man’s *ipse dixit* is accepted, unless upheld by his strong reasons.

Let us select some specimens from those works which claim great antiquity for man.

**Deltas.**—Sir Charles Lyell claims "that the deposits forming the delta and alluvial plain of the Mississippi consists of sedimentary matter extending over 30,000 square miles and in some parts several hundred feet deep. The lowest estimate of time required for this deposit would lead us to assign a high antiquity, amounting to many tens of thousands of years (probably more than 100,000), to the existing delta." He also says that, "near New Orleans, while excavating for gas wells, the workmen came upon the skeleton of a Red Indian, sixteen feet below the surface, beneath four buried forests superimposed one upon the other." Dr. B. Dowler, who investigated the matter, ascribes an antiquity of 50,000 years to accumulate the material above the skeleton, and Lyell approves the calculation. These are the facts according to Lyell, who made one hasty visit to North America. Brig. Gen. Humphrey, Chief of the U. S. Army Engineers, with the aid of the War Department, comes to this conclusion, after several years spent in investigation: The delta extends over an area of 12,300 square miles, the depth of deposit is about fifty feet, and the age of the delta or alluvial plain is 4,400 years. That Lyell should be led astray by such an unsound investigator as B. Dowler, M.D., may well excite astonishment. "It is possible that the New Orleans man may be one or two thousand years old, but to claim 50,000 years for him is provocative of laughter."†

At the foot of a steep embankment at Natchez, in the "loess" or alluvium, were found the bones of the mastodon, and of a species of the ox and the horse; among these were some human bones. The human bones were supposed to be in the same formation, and of the same age as the mastodon. They were thirty feet below the surface, measured up the side of the embankment, and some geolo-

* Lyell's *Antiquity of Man*, p. 43.
† *Chicago Advocate*, E. Andrews, M.D., May 28, 1868.

gists believe them to be older than the delta proper; if so, they are from 100,000 years old to some indefinite number.

Applying the same reasoning to the delta of the Nile, it would be much older. Sir Charles Lyell gives a full account of the investigations in the alluvial plain of the Nile.* Between the years of 1851 and 1854, under the direction of the Royal Society, Mr. Leonard Horner undertook the work of investigation. The practical part of the work he intrusted to an Armenian officer of engineers, Hekekyan Bey, who had for many years studied in England. There were two sets of shafts and borings sunk at intervals, across the valley, from east to west. One consisted of fifty-one pits and artesian perforations between the Arabian and Libyan deserts in the latitude of Heliopolis, about eight miles above the apex of the delta where the valley is about sixteen miles wide. The other line of borings and pits, twenty-seven in number, was in the parallel of Memphis, where the valley is only five miles broad. Every where these sections passed through the ordinary Nile mud of the present day, sometimes meeting with layers of quartzose sand blown from the adjacent desert by violent winds. Bones of the ox, dog, dromedary, and ass were frequently found, but neither vestiges of extinct mammals nor marine shells were any where detected. There were also found, in the first sixteen or twenty-four feet, jars, vases, pots, a human figure in burnt clay, and a copper knife. Various theories have been adduced in explanation of the formation of the delta, which must be omitted. Some have claimed 3,000 years as the age of these relics, others 30,000 years and upwards. The conclusion of J. S. Jewell, is, indeed, a just one: "In relation to the delta of the valley of the Nile, no one is entitled to speak until it has been more fully explored."†

**Coral Reefs of Florida.**—Sir C. Lyell says: "In a calcareous conglomerate forming part of the above-mentioned series of reefs, and supposed by Agassiz, in accordance with his mode of estimating the rate of growth of those reefs, to be about 10,000 years old, some fossil human remains were found by Count Pouriatis. They consisted of jaws and teeth, with some bones of the feet." Jeffries Wyman, M.D., in a paper on "The Fresh-Water Shell Heaps of the St. Johns River, East Florida," says: "Count

* Lyell's *Antiquity of Man*, p. 33.
† *Meth. Quart.*, Jan., 1869, p. 111.
The Antiquity of Man.

Pourtales, however, visited the shell heaps at Old Enterprise, Lake Monroe, in 1858, when he obtained from among the shells fragments of pottery, and bones of animals. He has not published an account of his observations, but informs me that he came to the conclusion that this mound was artificial.* In the same paper he says: "We know of no data, based on the quantity of materials of which the mounds were formed, on which to estimate the time required to build them." This testimony comes directly from the man who made the discovery, yet Lyell proves (?) that there is an antiquity of 10,000 years.

Prof. Whitney's California Skull.—Probably all have heard of the skull that was exhibited in this city last August, at a meeting of the American Association for the Advancement of Science. It was then supposed to come from the tertiary formation. Some of the learned savans put Moses to blush by claiming 70,000 years for its age. Prof. Silliman, of New Haven, who has personally explored the region where the skull was found, shows clearly that it was a hoax, and Prof. Whitney is the victim.

Bones of Extinct Mammalia.—In connection with the bones of the mastodon and megatherium have been found human remains. As these animals are now extinct, a great antiquity is claimed for these remains. Are these animals many centuries old? The mastodon Giganteus found in Orange county, New York, is preserved in Dr. Warren's museum, Boston. In the cavity of its belly it had five or six bushels of pine and maple twigs, in an excellent state of preservation. The vegetable fibre is yet in the hollows of its teeth, and most any man of common sense needs no scientific calculation to assure him that these fibres are not many centuries old. The Indians have a tradition that their fathers had seen, in the forest large deer never lying down but leaning against a tree while they slept, and that they were tree-eaters. A skeleton of an American mammoth was found in Mexico, about the time of the Spanish conquest. The discovery of the bones of the megatherium, on the surface soil of South America, interested the antiquarians; but how many millennia will bones last in such a climate?

Abbeville Bones.—Among the latest discoveries is that of the jaw-bone in Abbeville, France. It was supposed to be in the glacial or diluvial period. A scientific jury was sent from London to Paris to render a verdict. The bone was "not guilty" of proving a remote antiquity, as it emitted, when sawn or burnt, the peculiar smell of fresh bones. Who knows but it is the one with which Samson smote the Philistines.

The Darwinian theory of the transmutation of the species; that of the linguists, from the number of languages; and that of the Egyptologists, from the existing monuments in Egypt, must be passed over for lack of space.

The interpreters of the book of Revelation claim about 6,000 years as the age of man. That it must be so, we do not claim. The interpreters of the Bible are but human and liable to error. The Bible does not profess to give chronological data from which to estimate the antiquity of man. We think it can be safely said with all fairness, that all these geological changes may have been formed within that period of time. Geology has not yet arrived at such a stage of development as to permit one to speak with much assurance regarding its conclusions. But this subject has fallen into the hands of unbelief. Enthusiastic investigators should be very careful what theories they advance opposed to the Word of God, as thousands, who have not the means of investigating for themselves, are influenced by those theories regarding their opinions of Divine truth, and scientists must incur the responsibility. We feel that the seeming conflict between the "word" and the "works" of God will show that science and revelation both tend to prove that they have the same author. They will not contradict, but tend to the one object — truth.

MIANTOWONA.

Long ere the Pale Face
Crossed the great water,
Miantowna
Passed with her beauty
Into a legend,
Pure as a wild flower
Found in a broken
Ledge by the sea side.
Let us revere them,
These wild wood legends,
Born of the camp fire!
Let them be handed

Down to our children—
Richest of heirlooms!
No land may claim them;
They are ours only,—
Like our grand rivers,
Like our vast prairies,
Like our dead heroes!

In the pine forest,
Guarded by shadows,
Lie the haunted
Pond of the Red Men.
Miantowona.

Ringed by the emerald
Mountains, it lies there
Like an untarnished
Buckler of silver,
Dropped in that valley
By the Great Spirit!
Clouds scudding northward!
Sometimes an eagle
Fluttered across it;
Sometimes a single
Star on its bosom
Nestles till morning.

Far in the ages
Miantowona,
Rose of the Hurons,
Came to these waters.
Where the dark greensward
Slopes to the pebbles,
Miantowona
Sat in her anguish;
Ice to her maidens,
Ice to her chieftains,
Fire to her lover!
Here he had won her,
Here they had parted,
Here could her tears flow.
With unwet eyelash
Miantowona
Nursed her old father,
Oldest of the Hurons;
Soothed his complaints;
Smiled when he chided
Vaguely for nothing,—
He was so weak now,
Like a shrunk cedar
White with the hoar frost.
Sometimes she gently
Linked arms with maidens,
Joined in their dances;
Not with her people,
Not in the wigwam
Wept for her lover.

Ah! who was like him?
Fleet as an arrow,
Strong as the bison,
Literate as a panther,
Soft as the south wind,
Who was like Wahwa?
There is one other
Stronger and fleeter,
Bearing no wampum,
Wearing no war paint,
Ruler of councils,
Chief of the war-path,—
Who can gainsay him?
Who can defy him?
His is the lightning,
His is the whirlwind.
Let us be humble,
We are but ashes,—
'Tis the Great Spirit.

Ever at nightfall
Miantowona
Strayed from the lodges,
Passed through the shadows
Into the forest;
There, by the pond side,
Spread the black tresses
Over her forehead.
Sad is the loon's cry
Heard in the twilight;
Sad is the night wind,
Moaning and moaning;
Sadder the stifled
Sob of a widow.

Low on the pebbles
Murmured the water;
Often she fancied
It was young Wahwa
Playing the reed-flute.
Sometimes a dry branch
Snapped in the forest;
Then she rose, started,
Ruddy as sunrise,
Warm for his coming!
But when he came not,
Half broken-hearted,
Miantowona

Went to her people.

When an old oak dies,
First 'tis the tree tops,
Then the low branches,
Then the gaunt stem goes!
So fell Towanda,
Oldest of the Hurons,
Chief of the chieftains.

Miantowona
Wept not, but softly
Closed the sad eyelids;
With her own fingers
fastened the deer-skins
Over his shoulders;
Then laid beside him
Ash-bow and arrows,
Pipe-bowl and wampum,
Dried corn and bear meat,—
All that was needful
On the long journey.
Thus old Towanda
Went to the hunting
Grounds of the Red Man.

Then as the диги
Rose from the village,
Miantowona
Stole from the mourners,
Stole through the corn-fields,
Passed like a phantom
Into the shadows
Through the pine forests.

One who had watched her—
It was Nahohi,
Loving her vainly—
Saw, as she passed him,
That in her features
Made his stout heart quail.
He could but follow;
Quick were his footsteps,
Light as a snow-flake,
Leaving no traces
On the white clover.

Like a trained runner
Winner of prizes,
Into the woodlands

Plunged the young chieftain.
Once he abruptly
Halted and listened;
Then he sped forward
Faster and faster
Toward the bright water.
Breathless he reached it.
Why did he crouch then,
Stark as a statue?
What did he see there
Could so appal him?
Only a circle,
Swiftly expanding,
Fading before him;
But, as he watched it,
Up from the centre,
Slowly, superbly,
Rose a pond lily.

One cry of wonder,
Shrill as the loon's call,
Rang through the forest,
Startling the silence,
Startling the mourners
Chanting the death-song.
Forth from the village,
Flocking together,
Came all the Hurons,—
Striplings and warriors,
Maidens and old men,
Squaws with pappooses.
No word was spoken;
There stood the Hurons
On the dark greensward,
With their swart faces
Bowed in the twilight.
What did they see there?
Only a lily
Rocked on the azure
Breast of the water.

Then they turned sadly
Each to the other,
Tenderly murmuring
"Miantowona!"
Soft as the dew falls
Down through the midnight,
Cleaving the starlight,
Echo repeated,
"Miantowona!"
TELEGRAPHING.

The principle which underlies the working of the telegraph is briefly this: By breaking the connection between batteries, the electric current is destroyed.

As in electricity like poles are repulsive and opposite poles attractive, all telegraph lines are worked by batteries, whose respective opposite poles are attached to the extremities of the wire. But the ground, because it is of either polarity, performs a very important part in the working of the lines. For a line from Chicago to St. Louis, a distance which can easily be worked by two batteries, Chicago attaches to the wire either pole of his battery, say the positive; St. Louis must then attach the opposite, or negative pole of his battery. Now, as electricity must have a complete circle of connection to complete a circuit, if no substitute could be found, it would be necessary to build another line between the same places, and attach to it the unoccupied poles of both batteries, thus forming a complete circle of wire. Instead of this, however, a short wire, called a ground wire, connects these unoccupied poles with the ground, and, by completing the circuit, answers the same purpose. A single battery and a ground wire thus form a perfect circuit, a fact of the greatest importance to the practical working of a telegraph line. When the line is broken, as it not unfrequently is, by wind or falling trees, an operator can tell which side of his station the break is, by touching his ground wire to either side of his switch; and a number of offices thus testing can easily locate the break so accurately that it is an easy matter to send out a repairer from the nearest office and have it mended.

But after a line is built and charged by batteries, it is practically useless if we can not break and close the circuit at will. This difficulty is obviated by a patent key, which is so constructed that when placed in the line the circuit can be opened and closed with great rapidity. But another difficulty now presents itself; for though we may know when we open or close the circuit, we have no means of knowing when others do the same. This deficiency is supplied by the "relay," an instrument so connected with the line that the electric current is forced to pass through it, and, by so doing, to generate magnetism. This magnetism is employed to attract a small upright armature to a metallic point, so that when the circuit closes a sharp click is heard. We have now perfected instruments by which the circuit can be opened and closed at pleasure, and each opening and closing is accompanied by a corresponding sound. All that remains is to provide a systematic alphabet of dots and dashes, and we readily see that the theory of sending and receiving messages is simple and easy. To make telegraphing practical, however, requires patience and practice on the part of the operator. He begins with his A, B, C, and works up, step by step, spending months and sometimes years before he acquires any great facility in the profession.

Besides the relay and key, another instrument, either a register or a sounder, is used as a help to the operator. The former records on paper what is received; the latter only increases the sound, so that other noises may not disturb the operator when at work. There is still another use which each has, namely, to overcome the variations of the electric current, arising from certain atmospheric causes.

The number of offices on each line varies from about ten to twenty-five, and every thing which passes over the line passes also through each office, so that every instrument on the line works simultaneously on the same business. To avoid confusion and the necessity of constant attention on the part of each operator, every office has a call of its own; and an operator becomes so familiar with the call of his office, that he answers it as readily as to his own name. Sometimes, even when he is asleep, his office call wakes him instantly, though his instrument may have been working all the time. An operator never sends a message until he has called and received an answer from the office where the message is to go; and when he is sending, if the receiving operator fails to get any word or signal, the latter interrupts, and asks for a repetition till it is understood. When there are many offices on one circuit, there is so much business that an operator has to watch for his turn to get his own business off. In such cases it not unfrequently happens that slight differences of opinion occur as to whose right is best attested, whereupon certain "operatic" courtesies, such as "Get out, you wretch," "Avant!," "Dry," "Scat," are hurled back and forth, till at length one or the other gets tired and quits, and then all goes on
The Man with Two Memories.

When all was made ready, which took far less time than it has taken me to tell it, New York began sending the report, which, in no perceptible difference of time, passed through eleven different States and three territories. About fifty operators were engaged in taking it at the same time, though separated by hundreds of miles; and, by the aid of manifold paper, each took from one to six copies, making nearly two hundred copies. These, published in as many newspapers on the following day, would be read by hundreds and thousands of people all over our land. This combination probably extended over more wire than any ever worked before or since, embracing as it did nearly five thousand miles, or about one-fifth the circumference of the world.

The rapidity with which business is dispatched varies considerably, according to the length of the circuit, the weather, and the abilities of the operators. The average number of words sent per minute, may perhaps be estimated at twenty-five, though some operators have been able to send as many as fifty, but not to sustain this rate. A person can get an idea of how great speed this is, by attempting to write from dictation, and he who accomplishes thirty words a minute may be considered a rapid penman. As in every other department so in telegraphing, there is constant progress. New and valuable instruments are being invented, and one by one are coming into notice and operation. The extension of lines and the laying of cables form an era in the history, not only of the science itself, but of the world, and are destined to produce marked results in the prosperity and intercourse of foreign nations, and the advancement of civilization. When science shall succeed in overcoming the influence of rain and fog, as it has done the influences of wind and wave, we may look for the fulfillment of Puck's prophecy, and see the earth girdled in twenty seconds.

THE MAN WITH TWO MEMORIES.

The curious, though by no means unexampled case of George Nickern, the German of New Orleans, who, after being all but killed by a fall from a platform some months ago, and for many weeks entirely deprived of the use of every sense as well as of consciousness, has recovered his health completely and his powers
of mind,—his memory excepted, which at present dates entirely from the beginning of his recovery, and is a complete blank as to all and every one,—persons, words, things,—his knowledge of which had been acquired before the fall, can not but suggest the question, what relation memory really has to the personal identity of man. The lad to whom we have referred seems to have been for a month at least in a complete detachment from the outer world, without any power of sight, or hearing, or speech; at the end of seven weeks he had recovered these senses and could use his tongue freely, but he retained no glimmer of recollection of any word, either of his native German or of English, which he had known before the accident, and his own mother and other friends were to him entirely new acquaintances, whom he had to learn to know afresh. He had to begin acquiring the language of those around him as if he had been an infant, and his progress was almost as slow. Still, all his faculties seemed acute and bright, and, dating from the origin of his new memory, he seemed to retain impressions well. His case is not a unique one. It is not impossible, if we may judge by some similar cases, that he should suddenly recover some day the whole of his suddenly extinguished stock of knowledge. There is an old case commonly cited in works on Psychology, of a student of Philadelphia whose memory was suddenly annihilated by a fever. He began painfully learning every thing afresh, and had got as far as the Latin and just mastered the Latin grammar, when his whole stock of knowledge returned as suddenly as it left him. Nay, it is even quite possible that this New Orleans lad might, if he had a fever, or a fresh fall, or any new disturbance of the brain, recover his old memory, and lose his new one, i. e., recover the recollection of all that he knew before the accident, and lose the memory of all that he has acquired since. Cases are on record of this sort of alternating memory due to some fever, the first attack of which modified seriously, we suppose, the condition of the nervous system, and the second attack of which reinduced the old condition of the brain, obliterating completely the later phase. It is quite conceivable, then, that George Nickern may some day suddenly recover the memory of the first twenty years of his life, and at the same moment lose that of the interval between the end of his twentieth year and the date at which this second solution of continuity might take place. These curious phenomena suggest very forcibly the question, what relation memory has to the personal life of man. They force upon us the impression that, though Plato's notion of the pre-existence of the soul during one or perhaps more than one all but utterly forgotten terms of life and experience, the faint shadows of which sometimes flit obscurely before the startled mind, may be, and probably is, a mere dream, — yet there is, at least, no sort of impossibility, no sort of contradiction to the ascertained possibilities of life, in the conception. George Nickern is a living example of a man who has pre-existed for twenty years on this earth before his own memory can authenticate for him any one act of his life. In his case we happen to have plenty of witnesses of what he was and what he did, before his new term of life began. * * * It is perfectly clear that what has happened, in consequence of a special event in his case, might have happened in the case of every man, supposing that all our minds had had a previous existence, and that the embodiment of them in our present organizations which becomes complete at birth had a universal tendency to snap the chain of memory just as George Nickern's memory has been snapped by his fall. Of course this is quite unfounded hypothesis. But it is at least a possible hypothesis. If one man can lead two lives without any ray of recollection of his first life entering into his second life, we may all do so, if there were any general cause operating on all of us, at all similar to the special cause which we see operating on him now. Nay, in some sense we do all lead two lives, of one of which we have no record or memory, and of the other of which we have,—the life of sleep and the life of waking. * * * Well, if every body lives two lives, one of which is usually bound together by a chain of more or less continuous memory and recollection, and one not,—and if now and then we find an individual living two lives, both of which are coherent in themselves, though they are, as regards memory, mutually exclusive,—it seems quite certain that the personal self, the “I,” is something absolutely independent of memory, something which might become as independent of memory as Plato suggested when he supposed that each individual soul was subjected to a whole series of lives, all of them separate wholes without conscious reference to each other, yet all of them united by some continuity of will and character which makes the discipline of the one supplementary to the discipline of the other. Nay, it
is even quite conceivable that the same mind should be leading simultaneously different lives under different forms of organization in a number of different worlds,—that I may, at the moment I write, be, without knowing it as an inhabitant of this planet, living a distinct life and career in Mars, and Jupiter, and Saturn, in all of which lives there is a principle of identity, in spite of the different conditions under which I live them. Nothing is more certain than that in this life we are influenced by perceptions and sensations, and even, odd as it sounds, by ideas of which we are not conscious. * * * And so, too, it is certain that there are, so to say, subterranean connections between the links of many chains of association, which carry on our mind from one term of conscious thought to another, without resting even for an instant on the intermediate link which really binds the two together, and without giving us even the chance of remembering what it was. And if this be so,—as it certainly is,—there is certainly nothing inconceivable in the notion that each of us may be living two or three simultaneous lives, under different conditions in different worlds,—though, of course, there is not the smallest reason to suppose that it is so.

We have put these somewhat paradoxical hypotheses only to give still more definiteness to our view, that none of them would touch in the least,—nay, that all of them assume and presuppose, —a real personal identity, uniting the disunited and fragmentary lives, which we have shown or assumed to be broken into two or more parts either by some failure of memory in time, or by some change of it into parallel and uncommunicating planes. George Nickern has already had two lives, two distinct reaches of consciousness, utterly exclusive of each other. In what sense, then, is he still the same man that he was before the accident? We should say in this,—that, though no obligation incurred, no affection formed, no hope indulged, no fear entertained, before his accident, remains to him now in the form of conscious experience, yet his character is doubtless still that which his previous life, together with his recent sufferings and new experience, have made it,—that even the obliterated experience, though it does not act consciously upon him, acts upon him unconsciously through the character it helped to form—that what he now is, as a moral being, depends in all probability much more upon his own acts during the first twenty years of his life, of which he can recollect nothing, than on the few acts of his second infancy which have accumulated only during two or three months. His second infancy is not, and can not be, in any way like his first. The store of experience by which he was guided before the accident is gone, but the character trained by that experience remains; and you might as well say that a blossom is independent of the stages of seed, root, stalk, and leaf, because it has no memory or record of them, as that George Nickern is so because he has lost the memory of them.—From The Spectator.

SPECTRAL ANALYSIS.—NO. II.

In our last article upon Spectral Analysis we confined ourselves to the general theory of the science, and its uses in determining the constitution of the various parts of the Universe. There is, however, another important branch of the subject which has lately been developed, and an explanation of the theory of this branch together with its workings, as illustrated by observations upon the star Sirius, will form the subject of this article.

Before, we considered only the visible part of the spectrum. The full and true spectrum, however, extends beyond the visible one in both directions, the greatest heat being found beyond the red end, while the greatest chemical power is found beyond the violet end of a spectrum. Just as there are sounds too acute or too grave for the ear to appreciate them, so there are forms of light which are imperceptible to the eye, and these make up that part of the spectrum where the light can not be seen, but where it is known to exist by its effects. Light travels with a velocity of 180,000 miles per second in a series of waves of extremely minute-ness. These waves, however, are not all of the same length, but each color of light is produced by waves of a particular length. The average length of these waves has been proved to be about the fifty-thousandth part of an inch, but those producing red light are so long as the forty-thousandth part of an inch, while those which produce violet light are so short as the sixty-thousandth part of an inch. It is not to be supposed that there are sudden limits to the length of light waves, but simply that these are the limits for the length of those waves that are visible to the eye.
Not only are the dark lines in the solar spectrum always found in exactly the same position, but whenever any of these lines are found in the spectra of other bodies, they always assume the same position in those spectra that they held in the solar spectrum. For instance, the dark lines in the solar spectrum, which correspond to the bright lines of the spectrum of the vapor of iron, always occur in every spectrum, in which they are to be seen at all, in precisely the same place as they appear in the solar spectrum. Spectra differ from one another, then, in having some different dark lines, and in having different numbers of these, but not in having the same lines in different positions. If, then, we find a spectrum shifted bodily, and thus that the dark lines do not appear in precisely the same position which they occupy in the solar spectrum, we must conclude that the cause is to be found in some peculiarity of the object thus examined. The spectrum of the star Sirius is found to be thus shifted. Let us search for the cause of this phenomenon. It is evident that, if waves of light are given off by any stationary body at regular intervals of time, these waves will also reach us with the same regular interval of time between them; but if the body giving them off moves towards us with a velocity bearing an appreciable proportion to the velocity of the waves of light, and these waves are still given off at the same regular intervals, the interval between them when they reach us will not be the same as in the first case, but must be shorter; just as, if two railroad trains were to start from the same station, the one ten minutes later than the other and both run at the same rate, they must arrive at their destination still ten minutes apart; but if, ten minutes after the first one had started, the second were to start from a station nearer the destination, the distance in time between them must be less than ten minutes. So, too, if the body moves from us, the interval between the light-waves must be longer in proportion. Bearing in mind, now, that the waves of different lengths produce different colors, let us consider the effect produced by the motion of a star, to or from us, upon its light, and thus upon its spectrum. In order to be particular let us consider the effect upon the red light only. The waves of red light are one forty-thousandth of an inch long. If now the star Sirius is moving towards us, its waves of true red light should come oftener and so be shorter, and thus their color would be changed, and they be moved towards the violet end of the spectrum together with their accompanying dark lines. If, on the other hand, Sirius is moving away from us, the waves of red light must come less frequently, and so be longer, and the color with its dark lines will be moved towards the red end of the spectrum.

Mr. Huggins has found, by direct comparison, that the conspicuous dark line of the solar spectrum, known as F, which is the line of hydrogen light, is removed in the spectrum of Sirius about one two hundred and fiftieth part of an inch from its true position. The displacement is towards the red end, which shows that Sirius is moving away from us.

The displacement having been carefully measured, enables us to calculate the amount of this motion. The observed alteration is found to indicate a recession of 414 miles per second. At the time of the observation, however, the earth, in her motion around the sun, was receding from Sirius at the rate of about twelve miles per second. Besides this, the sun, with his planets, is moving through space at the rate of 150,000,000 of miles per year in a direction almost exactly opposite to Sirius. Deducing these movements, we leave for the true recessive motion of Sirius about 780,000,000 of miles per year. This is simply the motion of the star away from us. But it has also a transverse motion of 450,000,000 of miles per year. Combining this motion with the star's motion of recession, we deduce an actual velocity through space of upwards of one thousand millions of miles per annum, or about thirty-three miles per second.

The discovery that the brightest star in the heavens is speeding through space at such an enormous rate, is of great interest. But this discovery is far more interesting on account of what it promises to do, than on account of what it has already done. If by it we can determine the motion of recession or approach of all stars visible to the naked eye, we shall have a fund of knowledge from which many important facts respecting the stellar system can be deduced. Up to the time of this discovery the absolute motion of no star had been known, but the apparent, or transverse motion of several had been calculated. Yet, from the consideration of the imperfect information afforded by the stars' apparent motions, astronomers have been able to deduce the fact that the sun is traveling through space at a rate of no less than 150,000,000 of miles per annum. If the method, which
Mr. Huggins has begun to apply, should be extended to all or even to many of the fixed stars, we may hope to see many important conclusions deduced. For we shall be able to know more about the motion of the stars towards or from us, than we have ever been able to learn about their transverse motion, and the former is quite as important as the latter, while from a knowledge of the actual motion of the stars, many satisfactory results may be reached. There seems to be a promise, then, that some day something may be learned respecting the movements of the sidereal system.

LOCAL.

We understand that Henry Gardner, of the class of '68, is studying law at Cambridge.

On the 17th of February, the students were favored with a lecture by Prof. Newbury, upon the subject: "America one thousand years ago." Also, upon the 1st of March, Dr. Da Silva, a Grecian by birth, and a surgeon in Maximilian's army in Mexico, lectured before the students upon the subject: "Mexico, and what I saw there." Both these lectures were interesting, and had many fine points.

By request of the students, the regular exercises of the College were suspended on the 22nd of February, and the day was devoted to such intellectual and patriotic exercises as eating pop-corn, reading the newspapers, playing chess, calling on young ladies, eating peanuts, writing to sisters, (?) etc., etc. But by far the most laborious part of the day's work was reserved till evening, when all were summoned to the dining hall, and expected to dispose of oysters, cake, apples, nuts, etc., in indefinite quantities. After the ability of all had been thoroughly tested in that direction, the remainder of the evening was spent in listening to songs, responses to toasts, and a general interchange of wit and repartee between professors and students. A very touching song, beginning,

"My oyster, 'tis of thee,
Sweet extract of the sea,
Of thee I sing,"

was sung to the tune "America." Mr. Nead responded in a humorous strain, to the toast, "The American Eagle," giving a remarkably fine illustration of the spread-eagle style of oratory. "Gas" was dispensed by Mr. Snowdon. After speaking of the different kinds of gas, and their uses, and making some very happy hits at some of the professors for dealing so extensively in a certain kind of that article, he closed by saying that it was time for him "to turn off the gas." "Milk for babes, strong meat for men," is the saying. If the others had given us milk, Mr. Barker furnished the strong meat for the feast. In response "To the incoming Administration," he presented a vivid picture of the faults of the present administration, and the glorious prospects for the future. The portion assigned to Dr. Burroughs was the "North Wing." The students opened their eyes wide with astonishment when he told them that the "North Wing" was designed for ladies as well as gentlemen, but closed them tighter than ever when he informed them that its location is about one hundred and fifty miles north of here. He then spoke of the North Wing of this building, and gave encouragement that it would be erected the coming summer. He closed by expressing himself highly pleased with the exercises of the evening, and suggesting the probability that the 22nd of February would hereafter be one of the regular holidays of the institution.

According to the usual College custom the last Thursday in February was observed by the University as a day of prayer. Prayer-meetings were held by the students at nine o'clock in the morning, and at four in the afternoon. A very excellent sermon was delivered in the chapel by Rev. Arthur C. Mitchell, of the First Presbyterian Church, at eleven o'clock. All of the services of the day were well attended by the students, and we hope great good may result from them. During the present week (the first of March) daily prayer-meetings are holding.

We have already received the following exchanges, and hope soon to have a much larger list:

COLLEGE ITEMS.

The Munich chemist, Liebig, says he has had seven calls to American universities in the last ten years, and has been strongly tempted by two of them to come over.

There are said to be five hundred American students attending German universities and institutions of learning.

The first examination for the admission of ladies to Cambridge University, England, is to take place on the fifth of next July.

The requirements of the graduates of the Scotch universities are much higher than in this country. Indeed it is said that it would be a difficult matter for our professors to graduate at Glasgow. There is more Latin and Greek with us, but more Natural Science and Philosophy with the Scotch. Their endowment system does much toward stimulating scholastic effort. There are prizes which entitle the person who wins them to $600 or $700 per annum in gold for ten years. It is nothing uncommon for a competitor for these prizes to spend a whole year in his preparation, for it pays well in the end if he succeeds. For 400 years has this institution been doing work for the world, and its list of officers has had a world-wide fame from the beginning. It matriculated 1,275 students last year. Its present number of professors is thirty-one. One million five hundred thousand dollars have been subscribed to build another University in Glasgow which is now in the course of erection, and which, when completed, will be the finest edifice in the world.

Madison University, Hamilton, N. Y., is to have an ornithological collection; 500 species and 1,500 specimens of European birds will be shipped this winter.

Eleven per cent. of the undergraduates of Hamilton College are sons of former students; twenty per cent. of the whole number are from Oneida county, and twenty-three per cent. are candidates for the Christian ministry.

Princeton Theological Seminary has been presented with the library of Rev. John M. Krebs, D.D., late of New York.

Cornell University is worth at least $3,000,000.

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and Zwingle appeared as popular reformers. It was the mission of Luther to combat the Jewish element in the Romish Church. His purpose was not to overthrow the Church but to reform it. So far as Catholicism was not directly opposed to the doctrines of the Bible he sustained it, for his love for the Church was strong and abiding. But he felt that the sale of indulgences was contrary to the whole tenor of scripture truth, and he opposed it with all the energy he possessed. Taking “justification by faith” for his motto, he advanced against the hosts of error which rose up before him. At about the same time that Luther began his work in Germany, a work in some respects more thorough was begun in Switzerland by Zwingle. While the mighty revolution
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EDITORS:

E. F. STEARNS.
D. DEWOLF.

W. WHITNEY.
Z. D. SCOTT.

ZWINGLE AND LUTHER.

Christian Catholicism, born in the midst of Jewish Pharisaism and Greek Paganism, felt the influence of both, and was transformed into Roman Catholicism. The Jewish element prevailed in that part of Christian doctrine relating to man, and in this way the idea of salvation by works was introduced. The Pagan element appeared in that which pertained to God, and by it false ideas of the Deity were inculcated, and reverence for symbols and images was awakened. Already had the cry for reformation resounded through Europe and been twice disregarded at the councils of Constance and Basle, when Luther and Zwingle appeared as popular reformers. It was the mission of Luther to combat the Jewish element in the Romish Church. His purpose was not to overthrow the Church but to reform it. So far as Catholicism was not directly opposed to the doctrines of the Bible he sustained it; for his love for the Church was strong and abiding. But he felt that the sale of indulgences was contrary to the whole tenor of scripture truth, and he opposed it with all the energy he possessed. Taking "justification by faith" for his motto, he advanced against the hosts of error which rose up before him. At about the same time that Luther began his work in Germany, a work in some respects more thorough was begun in Switzerland by Zwingle. While the mighty revolution
in ideas promoted by Luther must not be lightly spoken of, the
work of the Swiss reformer deserves a place in history by no
means inferior. Catholicism had lowered God and exalted man.
It was the work of Luther to lower man; that of Zwingle to exalt
God. Thus the work of each was a complement to that of the
other, and who will attempt to say which exercised the greater
influence upon the destinies of Christianity in the world.

That there were many points of difference between these two
men must be admitted. Luther, reared under a monarchical form
of government, and thus accustomed to the yoke of temporal
authority in worldly matters, could the more easily bear the
burdens imposed upon him by the Church. But those bonds
which seemed only gentle restraints to him, appeared ‘like fetters
of iron to the independent Zwingle. The spirit of liberty which
existed throughout Switzerland had so pervaded the heart of the
Swiss reformer, that he could not bear to submit to the many
traditions and restrictions of the Romish Church. Hence it is
only natural that the missions of these two reformers should
differ widely, and that the results of the Reformation should vary
in the two countries. Many things which were the natural
result of the free and impetuous disposition of the Swiss were
inexplicable to Luther. Always accustomed to follow the rules
of the Church so far as they did not absolutely conflict with the
commands of God, when he saw the Swiss acting in direct oppo-
sition to its dictates, he attributed their conduct to fanaticism
aroused by the preaching of Zwingle. When he heard of men
entering the churches, and destroying the images, crosses, altars,
etc., he was alarmed, and frowned upon any movement that
would in the least countenance such excesses. Seeing these
excesses committed in Switzerland, and thinking that Zwingle
was the cause of the disturbance, he strenuously opposed him.
But, however much they opposed each other at times, we must
award sincerity of motive to both. Both of them possessed an
ardent love for the truth, though, in the case of Luther, this
was partially weakened by his love for the Church. The differ-
ence between them will be easily understood if we consider the
different ways by which they decided between truth and error.
Luther approached a doctrine of the Church with the thought:
Does the Bible forbid it? if not let it stand. Zwingle on the other
hand asked the question: Does the Bible teach it? if not, let it
fall. They were both naturally violent and hasty in disposition,
but sincere piety moderated to a certain degree the passions of
each. Each was ardent at his own convictions of right
and was firm and unyielding in his maintenance of them. So
far as justification by faith was concerned they were agreed.
The main question at issue was in regard to the Eucharist. Zwingle
had but little respect for the opinions of men who had preceded
him, and studied the Word for himself. He overlapped all
ecclesiastical distinctions and church barriers, and returned
directly to the teachings of the Apostles. At this point the paths
of the two great reformers begin to diverge. When the Swiss
reformer could find nothing in the simple worship of the Apos-
tolic age to warrant the costly displays and numerous forms and
ceremonies of the Romish Church, he immediately renounced
them. He believed not only in justification by faith, but in
simplicity of worship, and sanctification of life. He believed
that the Christian, in the right use of the Sacrament as repre-
senting the body and blood of the Lord, would be drawn nearer
to God, and in that way become more pure in life, while, by
thinking that he literally met Christ in the Sacrament, he would
become less desirous for a union of heart by faith. Whatever
may have been said to the contrary then, it was a profoundly
religious view that led Zwingle to the adoption of his peculiar
doctrines. Luther had always believed the bread and wine to be
some thing more than mere symbols, and the many excesses of
those who considered the elements used in the Eucharist as signs
only of something spiritual, strengthened him in his faith, and
henceforth he attached a higher significance to them. According
to his teachings, Christ had determined to give believers a full
assurance of their salvation, and, for the purpose of sealing his
promise most effectually, he added his real body to the bread and
wine. “Just as iron and fire,” said Luther, “which are never-
theless distinct substances, are confounded together in a heated
mass of iron so that in each of its parts there is at once iron and
fire; in like manner, and with much greater reason, the glorified
body of Christ is found in all parts of the bread.” But the strife
between these two great men was not carried so far as to inflict
permanent injury upon the cause of truth. On the contrary, time
has proved their opposition to be an element of growth in the
true faith. Had Luther alone been engaged in the work of Refor-
sighs and groans can be heard as he beseeches the Father to preserve His own work in the world for the sake of His Son Jesus Christ. But hark! His groanings have ceased, and the subdued tones that reach our ears tell us that faith has triumphed, that Zwingle has been led to see that though the present may look dark, yet the future is bright, for the right shall eventually succeed.

Luther has been summoned before the Diet at Worms. He must announce whether he will retract all of his previous teachings, or remain firm to his belief. Language can feebly express the tumult of his soul. He thinks of the mighty throng he is about to address, and his natural bashfulness nearly overpowers him. He thinks of the principles of right depending upon him, as it were, for their very existence, and a sense of his responsibility overwhelms him. Then it is that he finds relief in prayer, and from the depths of his agonized soul ascend broken petitions for strength equal to his day. "God Eternal! how terrible is the world! and how defective is my confidence in thee! O God! assist me against all the wisdom of the world! Thou must do it, for it is not my work but thine. O Lord! be my help! I trust not in any man. Thou hast chosen me for this work. Act then, O God! I stand by my side for the sake of thy well beloved Son Jesus Christ. * * * I am ready to give up my life for thy truth. And though the world should be filled with devils, though my body should bite the dust, be racked on the wheel, cut in pieces, ground to powder, my soul is thine. Yes, thy word is my pledge. God help me! Amen." "This prayer," said D'Aubigné, "explains Luther and the Reformation." The time of his appearance draws near. He stands before the open Bible lying upon the table, puts his left hand upon it, and lifting his right toward heaven, swears "to remain faithful to the Gospel, and to confess his faith freely, should he even seal his confession with his blood." Then he sits down and calmly awaits the time for him to make his reply.
SATURDAY NIGHT.

SATURDAY night! Perhaps no other two words fall so sweetly upon the ears of the student as these. Robbie Burns in the days of "Auld lang syne" sang touchingly of the "Cotter's Saturday night," but where is the poet who has immortalized the closing evening of the school-boy's week?

To-night the atmosphere out-doors assures us it is a cold world; but what matters it how hard the wind blows or the snow drives, when I am domiciled in my upper room of the University with few to molest and none to make afraid. I'm glad "another six days' work is done," and as I put on my study gown "all tattered and torn," replace my boots with a pair of old slippers, and draw my easy chair to the fire, I mentally exclaim "No more work for me to-night!"

Some folks think a fellow ought always to work—work—work. I don't. I have seen horses kept in the harness day by day at a slow plodding pace, and which could not be got into even a quicker trot without a free use of the whip, but, when turned loose in a pasture, they run, kick up their heels, and act altogether coltish. So too, I like to get out of the "traces" and "make me boy again," if only just for to-night. What matters it if some over-staid persons say it is foolish, childish? Who wants to get too big or too old to play the boy at certain times? I don't. Pasture seasons certainly should not last all the year, yet I am sure that a "six months' steady pull with no turning out to grass is entirely too long. I, therefore, have no compunctions of conscience against whiling away this evening by smoking my pipe charged with the best Kinnikinic. He's to be pitied who can't enjoy a good meerschaum and quaffing a mug of beer.

But the lamp grows dim, the wood in my stove has burned to ashes, and I long for the loving embrace of Somnus. I wonder why sleep was made a God rather than a Goddess? I suspect it must be because ladies are so much greater sleepers than men.

Gracefully the fragrant smoke in airy clouds floats around my head and disappears. How like the boyish hopes, beautiful to look upon, yet lasting only for a moment. Then, too, what a story of domestic life does my mug of beer illustrate. A great deal of fuss, effervescence and visible nothingness on the top, while beneath there is such a mixture of the bitter and the sweet that many, how many! are found willing, even desirous to partake and run the risk of the doubtful consequences.

Good night! Let us ever prize our Saturday night, for soon they will be ended and the Saturday night of death come. May we all cheerfully welcome it, and be ready to cease from our labors and enter upon the "rest that remaineth."

A REVERIE CONCERNING BOOKS AND AUTHORS.

As I was meditating some time ago upon the injustice to authors of true genius, and upon how seldom writers who deal only with simplicity and truth meet with present reward, while daily honors are lavished upon those from whom emanates only sensational literature, I fell into the following reverie. I thought I was traveling some where in an old well-worn coach with only two fellow-travelers, each a contrast to the other. I soon found our companions by their conversation to be "Bombast" and "Simplicity." Each seemed absorbed in some work of popular literature, and each seemed unmindful of the other and indifferent towards him. Bombast with an important air would ejaculate some parts of the book he held, exclaiming, "grand, glorious, did any one ever write as this one, can this be equaled." Bombast had certainly a fine appearance, and a grand bearing and style which could not fail to attract at first. Simplicity was modest, retiring, but was certain to win for himself the affection of those a short time with him. He had a quiet, truthful way, which soon secured my confidence, and awakened in me the warmest admiration. While Bombast attracted my attention by his fantastic conversation, Simplicity won my heart by his earnest, artless talk.

I noticed in the great-coat pocket of Bombast a volume of Tupper, and a quantity of the popular literature of to-day. He had also many of our late novels and romances, which he told me he especially enjoyed, accordant as they were with his taste and style. The book which he held in his hand, and to which he told me of all books he was most partial, was "Young's Night Thoughts." He had also with him a copy of "Young's Love of Fame," which of all the works of standard authors he considered second only in