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Editorials.

The question of the admission of women to the educational advantages of McGill University is, we believe, under discussion at this moment. A committee has been appointed by the Corporation to collect information regarding the internal economy of the institutions which have already sanctioned altogether or in part what seems to be an extremely revolutionary movement. We do not intend to discuss the matter on its theoretical merits or demerits. That there are women desirous of embracing such opportunities of gaining advanced knowledge as Universities alone can offer is a fact; that they can more than hold their own in competition in certain branches of knowledge has been demonstrated time and again; and that the promoters of what is called the intellectual enfranchisement of women are rapidly increasing in number and in influence forces itself on the mind of any one who will take pains to inquire into the question historically. We do not propose to discuss in general terms why women should or should not be admitted to the privileges of a University training; that species of argument has been abandoned by all save those who are anxious to prove that woman's sphere is distinctly non-intellectual. These people conjure up all kinds of imaginary evils, anarchy among them, if women become, as undergraduates, rivals of men. Fancies of

every shade and colour are, however, wonderfully modified or completely dispelled by contact with experience. We allude not only to the surmises of teaching bodies, but also to the whimsical notions of many of the students whom they teach, and we speak, moreover, from intimate acquaintance with the system of co-education in its freest form. But at present we desire to point out the various methods in which the desire for a University education for women has been met and to notice the salient points of the history of the movement on its practical side.

One method is to establish colleges for young women similar in routine and in instruction to such colleges for young men as are widely recognised on account of their excellence; and to confer at the conclusion of the course of study degrees of the same title as those earned by men. The most conspicuous example of this kind of college is Vassar. Another method is to form in existing Universities an "annex" or department specially for women and to educate them separately by the professors already on the staff or to elect professors for the special purpose of teaching women only; but in either case the courses for the men and the women are the same, and also the examination papers, wherever the department is a common one; the degree is granted by the University without distinction of sex. A third method is to deliver lectures to what we called "mixed" classes; in short, to establish co-education. The main objection to the first method is that separate colleges are apt to cheapen their degrees and to become little better than High Schools unless they frequently come into contact with the work carried on in vigorous institutions founded for the education of men and jealously watched by those who are abreast of most recent discovery.

The agitation in favour of the higher education of women in England began about thirty years ago. It was opposed on various issues: "First that the average female mind is not capable of grasping the more difficult subjects of the University course; secondly, that the average female constitution is not equal to the strain to which the severity of such a course subjects; thirdly, that learning converts women into pedants—vulgarly called "blue-stockings"—so that its general prevalence among the sex would destroy the charm of social life; and further, that a woman is not a man and therefore, *ex vi termini*, she should not have a man's education. The answer to these objections was a practical one; the creation of Queen's College, London, where the course of study was made identical with that of King's College, London. The founders of Queen's College, London, hoped to induce the University of London to grant degrees to their students as it had already done to those of King's College for many years, but the University could not see its way clear to this until 1878. In the meantime, University College, London—the largest of the many colleges which prepare candidates for the examinations of the University of London—had opened certain of its classes to women. This concession was granted rather more

As far as we are concerned the fault must be laid entirely on the post-office.

We see by the *'Varsity* that at the late meeting of the Toronto University Football Club the advisability of continuing the annual match with us was discussed. Most of the speakers seemed to be of opinion that the match ought to be kept up, the only obstacle being the expense. We on our part sincerely hope that the committee will see fit to accept our challenge, as this is the only inter-University contest which we have, and is looked forward to by us as one of the principal events of the season.

The *King's College Record* is rather interesting but it should not devote so much space to stories.

We have received the first number of the *Philomath*, a small sheet hailing from Ottawa. The first attempt is decidedly poor. We advise the editors to charge a little more, and bring out a neater paper.

Astrum Alberti is a rather neat paper but has not much solid reading matter. If it can manage to weather through we think it will improve with time.

A rival to the *Presbyterian College Journal* has appeared in the shape of the *Knox College Monthly*, the receipt of the second number of which we have to acknowledge. This new aspirant can in no sense be classed as an ordinary College paper, being in fact a religious periodical. We of course have nothing to do with the religious views propounded therein, but on independent grounds we must say that the article on Popular Amusements enunciates some of the most narrow-minded opinions we have seen for a long time.

The *Sunbeam* for February is not very interesting to outsiders. We thank Frank M. for her initials.

Our Methodist contemporary, *Acta Victoriana*, is managed by twelve editors; including an editor-in-chief, associate, local and literary editors; two Business Managers, a Chairman and Secretary of Board, etc. The present number is largely, we may say almost entirely taken up with Dr. Coleman's Inaugural Address. It complains of the *'Varsity* for mixing its jokes with the vile hash of their "Five O'Clock Tea."

The *St. Mary's College Journal* was one of our most regular exchanges during the past year. It has now changed its name to *St. Mary's Sentinel*, and has undergone considerable improvements. The latter were much needed. The improvement which the first number of the *Sentinel* exhibits is not confined to the cover, but is noticeable throughout.

We have received the *Undergraduate* for the first time. It is largely taken up with personals, and does not contain very much original matter.

We have received the following:—*The Dalhousie Gazette* (3), *L'Étincelle*, *'Varsity* (4), *The Acadia Athenæum*, *St. Mary's College Journal*, *Fredericton University Monthly*, *Queen's College Journal*, *Harvard Advocate* (2), *The Argosy*, *Knox College Monthly*, *The Sunbeam*, *Acta Victoriana*, *Wolfeboro Gazette*, *King's College Record*, *The Dartmouth*, *Rouge et Noir*, *Astrum Alberti*, *The Philomath*, *The Undergraduate*, *Trinity Tablet*, *Morrin College Review*, *St. Mary's Sentinel*, *Presbyterian College Journal*.

Between the Lectures.

An Irish editor says he can see no earthly reason why women should not be allowed to become medical men.—*Ex.*

"Are you a Judge of Reprobates?" asked Mrs. Partington, as she walked into an office of a Judge of Probate. "I am a Judge of Probate." was the reply. "Well, that's it, I expect," quoth the old lady. "You see my father died detested, and he left several little infidels, and I want to be their executioner."

Prof. in Physiology Class.—"Which is the most delicate of the senses?" Boy.—"The sense of touch." Prof.—"Give the class an example." Boy.—"My chum here can feel his mustache, but no one can see it."

A man undertook to paint the destruction of Pharaoh's host in the Red Sea on one of the walls of a room. After a very short time he surprised his employer by asking him to come and view the finished picture. On going to inspect it he found the walls covered with red paint. "Where are the children of Israel?" he asked. "Gone over," answered the painter. "Where is Pharaoh's host?" he next inquired. "All drowned," said the painter.

Logic.—"The proper study of mankind is man," and the term man includes woman. But every study should be ardently embraced. Therefore, all students should ardently embrace, etc.—*Q. E. D.*

They call it a case of drunkenness in Chicago when a pedestrian tries to set his watch by a thermometer.

Of all countries Ireland may justly claim to be the land of Pat-riots. We think it must be due to the fact that it is above all others, truly, Ire-land.—*The Dartmouth.*

"John," said the pious grocer, "have you sanded the sugar?" "Yes, sir." "Larded the butter?" "Yes, sir." "Floured the ginger?" "Yes, sir." "Then come in to prayers."

It was a Chaddock boy who, believing in translations as free as the genius of our country, translated *dux femina facti*: "the fact is, woman is a duck."—*Con.*

A Senior (reciting psychology outside)—"The nullification of the apparent dualism of things can be prognosticated by the sentient susceptibilities appertaining to the convergent lines of evident damfoolishness."—*Bowdoin Orient.*

At the conclusion of a scientific lecture lately delivered in this city, one of the audience arose and thanked the lecturer in a neat speech. Two ladies, of the higher education class, discussing the latter gentleman's performance were overheard to remark that they considered it "very good for an expectoration." They meant extempore.

(Scene:—*The home of a Methodist minister. Enter the son, a little over.*) Rev. D. D. (sorrowfully)—What! William, drunk again! Son—(*Hic*) Never mind (*hic*), father, so am I. *Ex.*

Imagine the chagrin of the Primary class, in Medicine, at finding, but a few weeks since, that they had so long possessed a member, unappreciated—a biped of orthodox matter, composed of columnense cells with hairs on. Wil—sons of men never out-grow such cilise—ness.

There does not exist, after all, such an outrageous diversity, between Medicals and Divinity men, there is that little all in favor of the former, who will practise, while the latter preach.

PEPYS.

We give below a chapter of a Sporting Novel, which has been proved to be a genuine production of Samuel Pepys, Esq. The moment this fragment first appeared in print the attention of Europe was concentrated upon it, and a German professor of the highest eminence was enabled, after gathering with almost superhuman perseverance a mass of information upon the subject, to declare upon incontestable evidence, that it was authentic, as was also the endorsement in Mr. Pepys's handwriting. We may mention that we ourselves paid a visit (at his especial request) to this distinguished professor (who, with the natural modesty of his race, shrinks from the honours that would certainly be showered down upon him were his name to be published in these pages), and with our own eyes (assisted by a "double million gas magnifier," kindly lent for the occasion by Mr. Weller, junior,) inspected the ancient MSS. collected by him, and proved that his statements were on all points most accurate and trustworthy.

The subject of the Novel, and the acquaintance therein displayed by the writer with the field sports of British India, would appear to give some colour of truth to the rumour which at one time prevailed, that the author was for a considerable period Governor General of that vast dependency.

[Endorsed in Mr. Pepys's handwriting. "Returned from y^e office of y^e Fylde newspaper, with y^e comp^{ts} and thanks of y^e Editor. S. P."]

THE RIFLE IN THE DECCAN.

BY THE AUTHOR OF "LIFE IN THE RED SEA," "THE PRAIRIE AND THE PAMPAS," ETC.

CHAPTER XVI.

In this terrible predicament, knowing that if I advanced one step further, the infuriated female elephant would crush me to death with her powerful tusks; and if I receded but a yard, I should in all likelihood fall a prey to the wounded tiger, that with fearful roar was straining every nerve to reach me—I remained for some moments (to me they seemed hours) in a state of frightful suspense. My double-barrelled rifle was loaded with two of Black Buck's deadly shells, but in passing through the swamp, the bag in which I kept my caps had become so thoroughly saturated with water, that I dared not risk a miss-fire with the chance of being discovered by the elephant. As I knew that it would be some time before the syce could convey the intelligence of my critical state to the Major, I was about to relieve the monotony of my position by smoking a pipe of Bacon's best shag, when, in feeling for my tobacco-pouch, I found a few dry caps at the bottom of the pocket. To place two of them on the nipples was the work of a moment, and taking deliberate aim, I brought the elephant down by a well-directed shot in the root of the tail. As soon as I perceived the effect of my fire, I turned round, and sent the other shell through the head of the tiger, which stretched him lifeless on the grass. Fearing that if the natives discovered the dead body of the monster they would, after their fashion, cut off his long and silky whiskers, and so spoil the skin, I took out my clasp-knife, and commenced skinning the brute. It was lucky however, that I had reloaded my rifle; for just as I had ended my task, and was packing the skin in my carpet-bag, an enormous rhinoceros passed at a swinging trot in the direction of the plain. Hastily leaving the half-packed skin, I followed in its wake, and perceived at once by the animal's spoor, that it was a male of the largest size. The pace at which he was going gave me no chance of coming up within shot, if he went any distance. I hoped however that he would stop at a broad nullah some thirty miles off, a place much frequented by these beasts.

Running along at some twelve miles an hour, I managed to keep him in

view the whole way, and was rewarded for my perseverance by perceiving that he was making straight for the nullah.

When I arrived there, a most interesting sight presented itself. A small stream ran along the bottom of the nullah, which widened as it reached the middle into a broad basin. On the edge of this stood the rhinoceros I had followed, drinking eagerly of the refreshing fluid, while by his side stood one much smaller, evidently the female, gazing upon her lord with eyes of rapt affection; and surrounding both, and gambling in sportive play, were some eight or ten young rhinoceroses.

It was a perfect picture of domestic felicity, and would have formed an admirable subject for the pencil of a Landseer or an Ansdell. I looked for some moments upon the pretty group, hesitating to disturb so much happiness. But such sentimental feelings befit not the true sportsman. My project was soon formed. It was no less than this: to kill the two parents, and capture alive one or more of the young ones. I remembered to have seen, when on a visit to the English Resident at Rubbadubdub, in the Jugglepoor district, a tame rhinoceros which had been taken when quite young, and had become so domesticated that the servants were accustomed to make use of it in carrying weights, such as buckets of water, coalboxes, etc., which were hung over his horn, the powerful muscles of the neck admirably fitting it to perform such work. The Resident told me himself that it saved him the labour of three servants; and while I was there it brought into the drawing-room a coal-box full of coal that must have weighed nearly two tons. In the summer-time they made it useful in digging up potatoes with its long and sharp horn.

My present position was not unattended with danger. If I merely wounded with my first shot, I should have to sustain the attack of one animal maddened with pain, and of the other infuriated by the injury done to its mate;—while if I was so fortunate as to kill with my first barrel, the chances were that I should not be equally lucky with my second. I saw with half an eye that the only plan I could pursue with safety and success would be, if possible, to wound both animals with the same shot. But there were still difficulties in the way. The hide of the rhinoceros is very thick; and even should the shell pass through two thicknesses of hide in its passage through the body of one rhinoceros, its penetrating power would probably be so much weakened, as to render the injury it might inflict on the second comparatively trivial. But again, were this not so; were the penetrating power of the projectile not to be diminished in the degree I anticipated, its peculiarly deadly effect would be felt only by the second rhinoceros, in whose body it would burst, while the first would feel merely as if an ordinary bullet had passed through it, which, unless some vital part had been pierced, would not much affect it. Revolving these considerations in my mind, I came at last to the conclusion, that if I could send a shot through the eye of the male when it was alongside of the female, it would pass through the eyes of both animals, and if it failed to kill them, would at least render them incapable of doing any mischief. I say the shot must first pierce the eyes of the male because I was on high ground, and the female being lower than the male, the downward tendency of the missile would favour its transfixing her eye as well as the male's. To ensure greater accuracy, however, I took out a pocket theodolite, which I invariably carry with me, and found, on calculating the angle which the shell's trajectory would make with a horizontal line, that, as I could not move without being discovered, the female would have to be exactly two yards and a half distant from the male, and that he would have to incline his head to her side, so as to make an angle of $20^{\circ} 27' .0543''$ with a line perpendicular to the earth's parallax.* If circumstances should prove thus

* For the benefit of those who are not familiar with the more intricate processes of Mathematics, I will give a slight sketch of the means which I adopted for calculating this most important angle. Had I possessed paper, I might easily have solved the problem geometrically, by drawing a chord, employing, of course, the Harmonic pencil for this purpose. But having nothing whatever to write upon, I was obliged to have recourse to analysis. My data, besides the longitude of the Moon's descending Node, and the specific gravity of the trajectory corresponding to a value μ_{r-1} of the index of refraction from myself to the rhinoceros—which two quantities were, of course, from the nature of the case, known—were the following:—

- (i) the value of θ in the $r + 1$ th term of the expansion of $\sin x$.
- (ii) the value of $\pi^{\sin^{-1}2}$, calculated to $n + 1$ places of decimals.
- (iii) the n th differential coefficient of friction in the plane of the paper.

With these data to assist my operations I first extracted the $(-1)^{\text{th}}$ root of the logarithm of the square of the distance, and multiplied this by the sesquicubate ratio of the power to the weight. I then observed that if I collected all the terms involving $\log \cot \beta$, the remaining terms would form a geometrical series, of which the r^{th} term was $\sqrt{-1} \log(-2)$, and the $r + 1$ th term was $e^z \sqrt{(A+B)}$, where

A = irrationality of dispersion,
 B = the eccentric aberration.

Having arrived at this satisfactory result, I investigated, by means of the True Anomaly and the Hydrostatic Paradox, formulæ for obtaining the r^{th} term in the expression for the reciprocal of the Moon's radius Vector: whence, employing first approximations, and resolving forces parallel and perpendicular to the rhinoceros, I found the equation of motion to be of the form $\cot^{-1}(\sin D) = D \{ \sqrt{(2xyz)} \}^0$, which of course I immediately recognized as the equation to Casse-

favourable, I could certainly pierce both eyes of the male and one eye of the female, and probably seriously injure the other. To insure the perfect destruction of both her eyes, it would be necessary that she also should incline her head at the same angle as the male inclined his, and at the same time.

By a fortuitous concurrence of events, I had waited but a few minutes when the animals took up the required position, and bringing my rifle to the shoulder, I fired my right-hand barrel. To my great delight, both rhinoceroses fell at once and died without a struggle. It was touching in the extreme to witness the grief and astonishment of the orphans. With plaintive grunts they ran hither and thither, uncertain what to do or where to go, and ended by crouching close to the bodies of their deceased parents.

The difficulty now was to catch one of them alive. I took out my silk pocket-handkerchief, and managed, with the aid of my necktie, bootlaces, and watchguard, to make a pretty good substitute for a rope. But this was not sufficient. How was I to get near enough to place the extempore rope round the neck of one? The open space between me and them was so bare of vegetation, that it would be impossible for me to crawl over it, even on my hands and knees, unperceived; and the first sight they caught of me would probably send them off scampering into the impenetrable jungle. To lose the chance of catching one was not to be endured. I had indeed killed two of the finest full-grown animals that had ever fallen to the rifle of the keenest sportsman; but I remembered the old proverb, which says that a live donkey is better than a dead lion, and adapting it to the present case, I could not but admit that one young rhinoceros alive was better than two old ones dead.

While I was hesitating what to do, I called to mind the well-known influence of the human eye over the brute creation, and coupling this with the fact that I was myself a mesmerist of no mean power, I resolved to put forth all my strength of will. Why, I argued, should that mysterious influence which one man may exercise over another be confined only to the human race? Why should not man be able to render the brute as well as his fellow-man subservient to his will?

At all events I resolved to try; so fixing my eyes steadfastly upon the group of young rhinoceroses, I exerted my will to the utmost, so as, if possible, to bring them into a state of coma. I remained in this position without flinching for six hours, without producing any apparent effect, which may be partially accounted for by my being at least a mile and a-half distant from the animals. At the end of that time, however, I descried evident signs of drowsiness among the juveniles, and in a few minutes more one after another fell on its side wrapt, so far as I could judge, in deep slumber. I deemed it expedient, however, to continue operations for some time longer, before I ventured to approach them. When I did so, I discovered to my great joy, that I had succeeded beyond my most sanguine expectations. All of the ten young rhinoceroses lay inanimate, in a state of coma.

It was with mingled feelings of gratification and sorrow that I beheld this picture of still life; of gratification, when I considered that I was now so near the attainment of my dearest wishes; of sorrow, when I thought of the consternation which would seize the innocent young when they awoke from their involuntary slumber.

There was, however, no time to be lost. Already did the biggest of the ten evince signs of approaching reanimation. Hastily making a few passes to secure the immobility of my subjects, I drew out of my pocket a large gimlet, my constant companion, and taking it out of its case, bored a hole in a transverse direction through each of their horns, and inserting the rope in these, I tied the ends together, and thus made certain of my prey. But it was impossible for me to carry such a dead weight, I was obliged partially to restore animation, at the same time taking care so to maintain my power over them as to compel them to follow close at my heels. Holding the rope in one hand, I retraced my steps leading the semi-somnolent rhinoceroses, and in a few hours reached the spot where I had killed the tiger and the elephant; where I found the Major with a train of natives in a state of great anxiety as to my probable fate. He was much delighted at seeing me alive and well, and betrayed considerable astonishment when he beheld my little followers.

CHARON.

grain's Telescope. Integrating, therefore, with respect to the direction-cosine of the required angle, I obtained the equation to the hyperboloid of two blankets. Neglecting powers of θ above the 27^{th} as practically useless, I differentiated the equation, and then integrated; differentiated again, and so on. I thus obtained a series of equations from which (by employing the method of Infinitesimal Parallelipeds, that of Least Squares being inapplicable) the complement of the angle I was investigating became known. Having found this, I began to employ Bernoulli's numbers and the Catenary to obtain the required angle. But finding that this would be somewhat laborious, as it would involve the extraction of the n^{th} root of infinity, and the integration of the base of an infinite cylinder, I adopted the shorter, and I fear less scientific mode of proceeding; namely, to investigate by means of Euler's Proof and the curvilinear asymptotes

of the Common Pump, the excess of $\frac{\{ \sqrt{(-1)} \}^{4n\pi}}{\text{vers}\pi}$ over the angle which I had already obtained.—AUTHOR.