

McGILL COLLEGE, MONTREAL, MAY 2, 1873.

PROSPECTUS.

In this age, when Progress is the watchword, papers and magazines are being issued from the leading colleges in different parts of the world.

Our friends across the border, who have been characterized by the readiness with which they come to the aid of, and liberally support the endeavours made for the advancement of educational improvements, are sending forth from their colleges journals devoted to science and literature.

It affords us great pleasure to be able at this time to announce to the alumni and friends of McGill University that settled arrangements have been made by the students of McGill College for the publication of a paper which is to be devoted to the interests of students, the University, Science and Literature.

The Faculties of the University are not responsible in matters connected with the forthcoming GAZETTE, for we understand they wish to occupy a neutral ground, similar to that taken by other Universities in relation to papers issued by the students. Hence we exonerate them from any share of blame which might possibly be attached to our errors; for, as novices, we cannot boast of that approximate perfection which we are ambitious to attain.

Regarding this issue, it is but just to our students to say that the work has been done amid the exciting scenes of the sessional examinations, and thus many of those who have contributed the matter which is contained in this specimen number have not been able to do justice to themselves. It is understood that during the summer vacation the students will collect matter of an attractive, interesting and instructive character.

It is a matter of regret to the Committee at present in charge of the UNIVERSITY GAZETTE, that the project was not started earlier in the session, as it has been impossible to obtain such a representation on the committee from the other Faculties, namely, the Faculties of Medicine and Law, as is desirable. This has been occasioned by the shortness of the sessions in Medicine and Law, when compared with that of Arts. But it is hoped that when the students gather for the work of another session, that men from the above-mentioned Faculties will be chosen in proportion to the number of subscribers among their students, and that these representative men will take their places as members of our managing committee, as co-equal workers with those now engaged in the pleasant task of filling the columns of the first UNIVERSITY GAZETTE of McGill College.

STUDENTS.

We are happy to state that those students to whom the matter of publishing the GAZETTE has been proposed, have very

generally responded in a liberal manner. A most praiseworthy *esprit de corps* has thus far been manifested by our students, which is an undoubted element of strength; and we trust that all the students will take a kindly interest in this, *their* UNIVERSITY GAZETTE, in which everything will be discussed from a student's standpoint. Hence the GAZETTE possesses for the student a very special interest. Hitherto there has been no favourable opportunity for our students to give proper ventilation to their oft-pent-up thought. To some of our number the work connected with the GAZETTE is a necessary part of their education for life work.

PROSPECTS.

We have now received offers of articles of a high order of merit from several who have devoted a considerable portion of their time to the study of the special subjects upon which they are to write for our columns.

One of our fellow students will spend next session in the Paris University. Another pursues his studies during next year in Germany. Another goes to Harvard, and another to Halifax, N. S. Arrangements have been made with them which secures them as our special correspondents for the session of 1873-74.

We now issue five hundred copies, and we trust, through the kindness of graduates of the University who are scattered throughout the Dominion, the circulation of this paper, telling them of the prosperity of their Alma Mater, will so increase that we will ere long be obliged to send forth a much larger number of copies.

Contributions from graduates and friends of the University are invited; but our columns will for the most part be filled with original matter from the students.

We do not open our columns to religious or political controversies.

It shall be the endeavor of the Committee of Management to make the GAZETTE *suaviter* shall recommend itself to the attention, and elicit the sympathy of all interested in the University, and the improvement-loving public generally.

TERMS.

The GAZETTE will contain 6 pages of reading matter and 2 pages of advertisements.

It will be issued monthly during the session of the Faculty of Arts, making 8 issues per annum.

The annual subscription will be one dollar.

Communications to be addressed to A. D. Taylor, Cor.-Sec., McGill College, Montreal, or to any of the Committee whose names are on the second page of this copy.

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THE PURSUIT OF NATURAL HISTORY IN MONTREAL AND VICINITY.

Having been requested to write an article on some Natural History subject, the writer thought that nothing could be more suitable or appropriate for the inaugural number of the UNIVERSITY GAZETTE than something concerning the natural history of the "land that we study in," and accordingly has selected the above heading for the following remarks.

In the first place, with reference to the Mineralogy of the district, a fair collection of Crystals of Calcite may be obtained at the limestone quarries in the neighborhood of the Mile End. The quarries are easily reached, either by walking or by the St. Lawrence Main street cars as far as Wiseman's corner, and then by taking the road on the right and walking up the village of Côte St. Louis for a short distance, the locality will soon be arrived at. The usual forms of the crystals met with here, are the common nail-head, the dog-tooth, and the hexagonal. Some of the nail-head crystals are quite large and transparent, attached by the lateral edges to the side of the fissures in the bedded rock. Quartz and Dolomite crystals have also been collected, as well as small cubical masses of Iron Pyrites.

By continuing in a north-easterly direction past the toll-gate at the head of the Papineau Road, and then for four or five miles to Côte St. Michel, any one, by making a few enquiries (in French) from the farmers, will soon be able to find out the exact location of "the cave." The sides of this cave are covered with occasionally a few small stalactites, one or two inches in thickness, and the roof. The inside of this place is very wet and muddy, and it would be advisable to postpone any intended visit till the summer-time.

There are a few other minerals to be met with at the quarries, but they are much less common than the above. On the Mountain a great variety of specimens of Dolomite may be collected, the best place being in the Protestant Cemetery, where the workmen are continually blasting out the rock for drainage and other purposes—all sorts of specimens, ranging from nearly all Pyroxene to others nearly all Feldspar, separate crystals of Pyroxene can only be obtained when the Dolomite is beginning to disintegrate, which does not often occur, although the writer has seen some very perfect crystals collected on the side of the aqueduct, about two miles out on the west end of the city.

Turning our attention to the fossils, the collector may resort to the Mile End quarries. Here, however, he may be slightly disappointed, as few fossils are to be obtained in the quarries themselves, but by a good use of one's eyesight, specimens both of the hemispherical and also of the fibrous *Stenopora* (*Stenopora petropolitana*, and *S. fibrosa*) may be obtained along with a few shells. It is best, however, to search along the fences. It is hardly necessary to add that the collector should, of course, be provided with a steel square-headed hammer and chisel, and be also well supplied with wrapping paper, to prevent the specimens from abrading each other. While at the quarries in addition to those fossils preserved in the rock, numerous specimens of Post-liocene shells may be gathered from the sand overlying the limestone beds. The commonest kinds are the *Saxicava Rugosa*, *Macoma Groenlandica*, and *Mya Truncata*, associated with others, occasional specimens of *Macoma proxima*, *Mya arenaria*, and mussels. The best locality for other species of Post-liocene remains, is at the brickyard near Côte St. Paul, by the side of the beautiful glen on the west end of the city. At the last named locality, in addition to the shells, the remains of silicious and other sponges may be collected; some of the spicules of the sponges, when examined under the microscope, presenting curious forms, anchor-shaped, &c. Besides these, if the loamy part of the deposit be examined with a pocket lens, flat spiral-shaped shells of Foraminifera may be observed. The plan usually adopted is to bring home some of the material containing the forams, and then after drying it well in an oven, or in the sun, put some of the dried stuff in an earthenware basin, and pour in a sufficient quantity of clean cold water so as to nearly fill the basin. As soon as the clay has become soaked, stir up the

whole, the object being to free the small shells from the clay, which absorbs the water quickly, and as the chambers or small cavities in the forams have become full of dried air in the first process of drying, when the clay is soaked end removed from the forams, the latter are buoyed up. Now, either carefully strain the surface water through a piece of muslin, which must be coarse enough to allow the water to freely pass through, and yet fine enough to retain the small shells; or what will answer the purpose, gently wave the water against the sides of the basin. If along the edge of the water, the forams will be seen a feather or with a camel-hair brush; the shells have then only to be carefully dried, and are soon ready for examination under the microscope. The commonest kind bears the expressive, though rather lengthy title of *Polystomella crispavera striatopunctata*. At Pointe Claire, specimens of the characteristic *Tetradium fibratum* may be gathered, and a few miles further, on the end of the island at St. Anne, the so-called worm burrows (*Scolithus*) of the Potsdam sandstone, along with shells in the associated *Califerous* beds, are to be seen. On the north-east side of St. Helen's Island, a small deposit of Lower Helderberg limestone occurs, from which, with considerable difficulty, a few fossils of shell marl, and peat lying about a foot under the surface, in the low lands in the neighbourhood of St. Joseph Street toll-gate. This deposit contains a number of existing fresh water shells.

The student in botany will most probably find the east end of the Mountain and the woods along with shells in the associated more prolific in the objects of his search than the west end, though of course flowering plants are met with all over. Some of the flowers, observed by the writer, growing on the Mountain, will certainly bear comparison, so far as general appearance, delicacy of structure and fragrance in the flower is concerned, with many of the costly, much-prized and much-cared-for exotics which are to be seen in the conservatories in our neighbourhood. Might not a similar overlooking of the charms of the wild flowers of his own native land, have suggested those lines of the poet Gray, that

"Full many a flower is born to blush unseen,
 And waste its fragrance on the desert air?"

Those in search of Ferns will find species of interest, both in the woods in the neighbourhood of the city, and also in the city. On the left side of the road to the Protestant Cemetery, one may find the Maiden-hair Fern along with others, and in the marshy spots between the cemeteries, and in the cemeteries elsewhere. One of the ferns is to be procured that are rather scarce *Polypodium* occurs abundantly, while in front, on the rocky ledges near the top, the smaller species *Woodsia*, and others, are found. Mosses, lichens, and fungi are plentiful—one of the latter, the *Hydnum coralloides*, being very handsome, and looking like a network of white coral. The microscopic examination of the petals of the flowers and sections of the plants found, will afford very much more pleasure than a mere cursory examination sufficient for determination of the species. For the purpose of making sections of most plants, an ordinary razor, which must be sharp however, will, for all practical purposes, answer very nearly as well as more costly apparatus. All that is required in addition to the sharp razor is a piece of smooth-planed wood to a steady hand. The leaf of the Mullein, which grows so common about the quarries, is well worth examining under the microscope, especially with polarized light, exhibiting its peculiar tree-like hairs, and the glandular hairs on the leaves of the common Sweet Briar are also interesting.

With reference to the Zoology, or animal life, the collector will find much that will interest him. In the first place, all sorts of creatures may be found living in the ponds, principally in those on the right side of St. Lawrence Main Street toll-gate. For the proper examination of these objects it is necessary to have a microscope; such a one as is now manufactured by Parkes & Son, and other English makers, for five guineas or thereabouts, has been the only one used by the writer, and has been expensive instruments as well for all ordinary purposes as the more beginner, by reason of the less loss in case it should be accidentally injured. Among the more interesting forms may be seen the *Amoeba*, *Vorticella*, and *Cyclops*, beside a common species of bivalve crustacean, having the valves of a whitish colour, and marked with three or four dark bands; only the edges of the body of this creature can be seen extended beyond the edges of the valves, as it swims rapidly here and there over the field of vision. For the procuring of the larger life of the pond, it is better to have a good strong cord net fastened on an iron ring, to which a long

pole is to be attached. Provided with such an apparatus, many things may be fished out easier than by using the hands. The latter method is not always pleasant, on account of the presence of a large greyish, rather flat-bodied water insect, a species of *Nepa*, and also the long and strong larva of the large water beetle. The *modus operandi* of the larva, when caught in the hands, is not at all agreeable, as it strikes its large side jaws or mandibles into one's finger. The fore-foot of the large water-beetle or *Dytiscus*, is usually regarded as one of the most beautiful objects for microscopic examination. Besides the above, a good collection of minnows, sticklebacks and other small fry may be made. In case it is desired to keep some of these latter in an aquarium, care should be taken to keep the sticklebacks in a separate vessel, as they will not hesitate to nip off the tails and fins of their fellow prisoners; the same precaution applies to all water beetles and insects. The ponds are also full of the common cray fish (*Astacus Dartoni*). These can be easily kept in an ordinary globe aquarium; it being only necessary to give them a small piece of fresh beef once every week or ten days; the meat must be removed the second day after it is put in, as it is apt to contaminate the water very rapidly. In case any of the cray-fish should die, a microscopic examination of the compound eyes will be found well worth any trouble necessary. The method adopted is as follows:—After removing the dead creature from the rest, place in a separate vessel of water, and allow it to remain there for four or five days, by which time the muscles will be found to separate more easily from the shell. Then carefully remove the eye from the head, and wash out its contents, either by means of a syringe, or by holding it under the water tap and allowing the water to stream. As soon as this is done, the interior is seen to be clean and empty, dry by placing on a piece of blotting paper. The eye-case when examined will be found to be made up of a great number of square divisions with diagonal lines in each. About the second or third week in the month of May, long strings of white jelly-like beads may be seen in the ponds; these are the eggs or ova of toads, pairs of which are to be seen along the edges of the pond; the female toad being nearly twice the size of the male. If some of these ova be brought home in a bottle full of water, the next day or so the embryo toads will make their appearance and begin to swim about. At this stage the young creature is provided with external gills, a tuft on each side of the head, which may be seen when examined under the microscope. In about a week or ten days, these gills begin to be absorbed by the young creature. The ova of frogs are also found in the ponds; they are similarly shaped, but in large masses. Young frogs, or tadpoles, in all stages of development, may be collected during the summer. Several species of shells are found living in the same ponds. One of the largest and finest of the univalves, is flat-whorled, with a large aperture or mouth, the edge or border of which is coated with white enamel, and there are distinct ridges on the whorls; this species is called *Planorbis macrostomus*, a name expressive of the style of shell. There is also the small bivalve, *Spheroium rhomboideum*, known by its yellow border, and the large species, *Anodonta Ferruciana*. In the St. Lawrence, in front of the city, quite a good collection of bivalve and univalve shells may be made; commonest among the former are specimens of *Unio complanatus*, *U. cardium*, and *U. radiatus*. An occasional pearl may be found in the mantle of these creatures. Among the univalves are *Planorbis trivolvus*, *Limnaea stagnalis*, and *Melania niagarensis*. On the mountain about twenty-five species of land shells have been collected. Prominent among these is the large white-tipped helix—*Helix albolabris*, *Helix concava*, *H. alternate*, and *H. monodonta*. The best time for collecting the latter is about the middle of September, when the weather is beginning to turn cold, at which time the creatures crawl under stones and fallen leaves. The lingual ribbon or tongue of many of the land and fresh water univalve shellfish, forms an interesting object for the microscope. The forms of the small teeth which busted the ribbon, can best be made out by using polarized light. The same may be done with the ribbons of *Helix concava*, *Planorbis macrostomus*, *Limnaea stagnalis*, and *Melania Niagarensis* will be found more interesting than the others, especially the long ribbon of the *Melania*, a species found about the islands on the St. Lambert side of the river, which is finer than any from the rest of our land or fresh water mollusca, and will bear comparison with lingual ribbons of marine species. The method used by the writer in preparing these objects, is as follows:—First drop the animal, when alive, into boiling water, which soon kills it, and loosens the hold of the muscles on the shell. After this remove the body by means of a hooked wire or pin, and put it into a solution consisting of equal quantities of Liquor Potassae and clean water; cover up the containing vessel and allow the whole to remain *in statu quo* for one week. Do

not attempt to hasten the action of the potash, in dissolving out the ribbon, by boiling; as this will very likely destroy the object altogether. At the end of the week the body of the animal will be found sufficiently soft; then pour the whole into a test tube and shake it several times so as to break up the body. After this is done add some more clean water, mix and pour out gently into another vessel, watching carefully for the small yellowish white ribbon, which, in the species named, is usually less than one quarter of an inch in length. As soon as the required object is seen, remove it with a camel-hair brush, and, replacing into the test-tube, add some clean distilled water, if obtainable, and shake up well, so as to remove any adhering portion of the body, as well as any trace of the potash. After careful washing, the ribbon is ready for examination, either with or without polarized light.

In addition to the foregoing, over two hundred species of Coleoptera, or beetles, have been collected in the vicinity of the city. Several kinds of butterflies may be seen flying about during the summer;—some of the latter are quite local, such as the large red-winged species—*Danaus archippus*, being most abundant in the fields near Victoria Bridge, and the Camberwell Beauty (*Antiopa Vanessa*) occurring in numbers about the quarries. The larvae or caterpillars of the latter may be seen, in the month of August, swarming on the shrubs in the above locality. The branching hairs on the body of these and other species of caterpillars, are fine objects for the microscope. Several kinds of Caddis, or case-worms, may be seen crawling in the water, along the bottom—principally around the islands opposite to the city. Some of the cases of these worms are very curious, being constructed either of grains of sand agglutinated together in the shape of a small shell or like a shallow trough, or else formed of short bits of the stems of water plants and chips. There is another class of insects which should not be overlooked, namely, the Poduridae. The scales from the wing-cases of certain species of Podura have frequently been used as test objects for ascertaining the defining power of the lenses of microscopes. The scales of a fine large greyish coloured variety, found under stones and chips on the east end of the Mountain, are worth examining. There is considerable difficulty in catching these Podurae, or Spring-tails as they are also styled; for when the insects are alarmed they have a habit of striking their forked tail against the object on which they may be resting, and thus enabling them to spring to a considerable distance out of the way. Various plans have been recommended for catching them, such as holding oatmeal about the places they frequent, and another, of holding the open end of a glass phial over the insect and allowing it to jump into the bottle. The latter method, however, is very much like that recommended to juvenile naturalists by nursery maids, of catching birds by putting salt on their tails. The following has been used with success by the writer:—Take two small glass phials like the so-called homœopathic bottles; fill one with dilute alcohol, and the other with sulphuric ether. Then, when the insect is seen, bring the uncorked bottle containing the ether till within three or four inches, and carefully drop some of the liquid on the insect, just sufficient to stupefy; which done, the insect should be carefully lifted up with a small brush, and placed in the other bottle. The above method will be found to succeed, so long as no shadow is allowed to come over the creature—if a shadow crosses, the springtail suspects danger, and is aroused to action and soon disappears.

Several species of snakes are found in the neighbourhood of the Mountain, and two or three kinds of newts, or water lizards, also occur living. The common yellow-bodied species, speckled with dark spots, living in the ponds on the right of the St. Lawrence street toll-gate, is furnished with external gills or breathing organs during the early part of the summer. The other species of greyish colour is much larger,—sometimes eight or nine inches in length—is also provided with external gills, and may be found under stones in different parts of the river.

Besides the above creatures two species of fresh-water sponges also occur living. The most common in the new basin at Windmill Point. The one grows on rocks, to the height or length of a foot or more, and branching in different directions. To this Bowerbank has given the name of *Spongilla Dawsoni*, in honor of Principal Dawson, who was the first to call the aforesaid gentleman's attention to the species. The other kind grows encrusting rocks, chips, &c. Sections of the branching sponge exhibit two sorts of spicules, both smooth, needle-shaped, thicker and slightly curved in the centre, one sort being considerably larger than the other, and forming the axis or mainstay of the organism, while the smaller ones are scattered through the body of the sponge. The form of spicule in the encrusting species is also pointed at both ends, thicker and slightly curved in the centre; but instead of being smooth, it is covered all over

with small spines or protuberances. In addition to these spicules, small spherical masses, of a yellowish colour, called gemmae or ova, make their appearance in the bodies of both the above species, about the beginning of the month of August. The small spicules forming the cases of these gemmae are of a birotulate shape; that is, they consist of a centre shaft connecting two wheel-shaped masses formed of radiating spokes, without the binding circular rim. Both of the above sponges are of a greenish colour; the stem of the branching kind having a thickness of a quarter of an inch, and the encrusting kind growing irregularly, about an inch thick in parts.

The foregoing items are of course but a tithe of what might be written on the subject, the design being merely to point out some of the best localities for collecting, and also to indicate a few of the leading objects to be procured.

For a further acquaintance with the subject the following books and articles may be consulted:—Principal Dawson's "Handbook of Zoology," and also his "Notes on the Post-pliocene Geology of Canada," published in vol. vi. new series of the *Canadian Naturalist*; some of the publications of Can. Geol. Survey; also Mr. Whiteaves' "On the Land and Fresh Water Mollusca of Lower Canada" in *Canadian Naturalist* for 1863, and A. S. Ritchie "On the Coleoptera of the Island of Montreal," published in *Canadian Naturalist* for 1869; besides the various collections, both in the Museum of the College, that of the Geological Survey, and also the one belonging to the Natural History Society.

The writer closes with the hope that the above article may be of some service to those who are about to pursue the study of the Natural History of Montreal, and who may perchance be less familiar with that history.

MONTREAL, April, 1873.

G. T. K.

LEARNING TO SHAVE;

OR,

THE MISERIES OF A FRESHMAN.

A freshman, having arrived at that age when "coming events cast their shadows before," deciding to hasten the coming event by purchasing a razor. This being done, he was soon inducted into the mysteries of the "Shaving Art" by a sympathizing senior who understood the troubles which were agitating the mind of the youth. Days passed by and our freshman rejoiced in secretly trying his new-found trade. But this was not long to last. The eyes of a mother and sister looked in upon him, and confusion covered his *not otherwise* covered face. The storm burst forth. Our hero found himself the victim of a persecution not easily described. A senior of McGill, moved with compassion at the sight of the miseries of the *tortured one*, invoked his muse with the following result:—

Tell me, ye winds, of any place
Where I, in peace, may scrape my face,
And free from fractious femles' broils
Complete these most momentous toils?

The hollow winds with dismal moan
Re-echo back my woeful tone,
No son of man in any place
Began in peace to scrape his face.

The awful daubs of soapy brush,
The trembling hand's erratic rush,
The fallen heaps of soapy down,
Have ever met with female frown.

No pity dwells in female heart
For manly chin's portentous smart;
They scoff alike at fevered rash
And coaxings of the young moustache.

Then list, ye winds, to what shall be,
In spite of woman's fell decree—
My blade shall fly with soapy rush
Till beard and 'staches grow like brush,
These shall the women's slights repay
With bristly prods from day to day.

All of the matter in this copy, with the exception of the "Heathen Pass-ee," has been written by our present students. We do not intend to do much "clipping."

ATHLETIC SPORTS IN MCGILL.

As an organ of college students, the GAZETTE will devote an adequate amount of attention to all subjects connected with their physical development. The question of Athletics is one that has been discussed with a good deal of earnestness on this continent and in England. A reaction has taken place in this respect, the excessive attention given to sports in the educational centres of the Old Country has led a large party to denounce them in no measured terms, and not only in medical, but in all classes of periodicals has there been a long series of articles presenting the subject from the two different stand-points. Our an outline of the subject being given; consequently, we have thought it better to have this article assume the form of a statement it may be stated here that the editors have good reason to believe that during the issues of next session, the GAZETTE will contain a series of articles upon this subject considered in its wide bearings, from the pen of a contributor well qualified to handle the subject.

From our position, it is impossible for us to engage in aquatic sports. It would damp the ardour of the most enthusiastic oarsman to have to travel some nine or ten miles before he could reach water smooth enough to permit him to engage in his favorite exercise. Such is our unfortunate position, and sports as our natural position has rendered possible.

From cricket, the closing of the session in the spring, before the ground is fit to play on, debars us. If it was not for this would do credit to us, we have no doubt that we could select a team that men who, as members of the University, for we have in our number ourselves as scientific players. Base-ball and Lacrosse have never been favourably received in college, but football is the game most played, and the one at which we are most successful. It recommends itself to us on two accounts; it can be played much later in the fall than any other game; and a novice requires much less experience to render the game enjoyable than in any of the other games we might play. But it would appear like heresy in the eyes of all football players to say that one can obtain an insight into the scientific mysteries of the game without undergoing a long course of practice. We appreciate this, but it is also a self-evident fact that a few lessons to one gifted with the physical qualifications are sufficient to make him understand the general principles of the game.

For many years past there have been annual Town vs. Gown, and Arts vs. Medicine, matches. But the practice games for these matches have not been well attended, and in every respect there was indifference in regard to united play. During last fall however the play was very much better, the practice games were largely attended, and although matched against a much stronger team the results of the two Town vs. Gown matches were very creditable to the students. The reason of this, is the occupation by the "medicals" of their new building adjoining the other buildings of the University. A larger number of them have played than in any previous year, and a marked improvement in the strength of the University team has been the result. Another advantage has resulted from this, and it is one the worth of which, we are convinced, the students of both Faculties appreciate; it is, the formation of a closer connection between us. With growing intimacy between our students, a growing conviction that our interests are united, and feeling that we have the common good of the University at heart, our feeling of *esprit de corps* will, instead of being confined to our respective Faculties, extend to our common Alma Mater, the University, and we trust that the editorial management of the GAZETTE, which next session will embrace representatives of all the Faculties, will be a means towards the attainment of this most desirable result.

During last season, the Montreal Football Club obtained permission to use the College Grounds for practice, on the condition that their play would not interfere with the convenience of the students. The result of this has been that their men have played with us and students in their games as the occasion happened. In their matches with the Quebec Club, the only ones they played, some five or six of our men, members of both clubs, played on their team. We trust that the Corporation will see fit to continue this permission, if they have not already done so, for the ensuing season. Our relations with them have been of the most cordial kind, and it must be a cause of gratification to both clubs that nothing has occurred, or is likely to occur, to interrupt our friendly play with them.

There is another subject connected with athletic sports which

will be brought under the notice of the students of the University by the GAZETTE in the early part of next session—that is, the advisability of holding an Annual Athletic Meeting at the close of the season. We have a large number of men who could take an active part in the games, and the entire feeling of the University is in favour of such a meeting. The sports would embrace all those usually entered upon at such times—running, jumping, kicking the football, &c., and a steeple-chase, for which our grounds are admirably adapted. The practice of football, too, is excellent training for all kinds of athletic sport and the meeting, besides being an occasion of much interest in itself, would be a suitable finale to our season. The formation of a Snow-Shoe Club has also been mooted, but it would be premature to consider this now. But in this, as in all matters, the GAZETTE will endeavour to express the opinion of the University, and to press all matters on the attention of the students which appear to the editors worthy of their consideration. We will give the subject of sports our careful attention, and in so far as they appear to us aids towards the objects for which we are gathered at McGill: with this as our conception of what we, as students, should aim at: to gain that degree of mental and physical power which in the pursuit of after life will bring the greatest success to our exertions, and the greatest honour to our Alma Mater.

"THE HEATHEN PASS-EE."

Although the following has appeared in one of our daily papers, it has not been seen by many of our students and will bear repetition.

The London *Spectator*, in a review of "The Light Green," a new book of parodies just published in England, says that the gem of the whole is "The Heathen Pass-ee," a "Pass-ee," it is explained, being a term applied

"To one whose vocation is passing
The 'ordinary B. A. degree.'"

The "heathen" in question, Tom Crib by name, has "plots that are dark, and not always in vain." One of these plots succeeds; he passes an excellent examination in Euclid, "the subject he feared," but

"He'd placed up his sleeve
Mr. Todhunter's extant Euclid,
The same with intent to deceive."

In a second attempt his fate overtakes him. Mr. "Bred Hard" shall tell us how:

"But I shall not forget,
How the next day or two,
A stiff paper was set
By examiner U—
On Euripides' tragedy, 'Baccha,'
A subject Tom partially knew."

"But the knowledge displayed
By that heathen Pass-ee,
And the answers he made
Were quite frightful to see,
For he rapidly floored the whole paper,
By about twenty minutes to three."

"Then I looked up at U—
And he gazed upon me,
I observed 'This won't do,'
He replied 'Goodness me!'
We are fooled by this artful young person,
And he sent for that heathen Pass-ee."

"The scene that ensued
Was disgraceful to view,
For the floor it was strewn
With a tolerable few
Of the 'tips' that Tom Crib had been hiding,
For the 'subject he partially knew.'"

"On the cuff of his shirt
He had managed to get,
What we hoped had been dirt,
But which proved, I reg. et,
To be notes on the rise of the Drama,
A question invariably set."

"In his various coats
We proceeded to seek,
Where we found sundry notes,
And with sorrow I speak,
One of Bohn's publications, so useful
To the student of Latin or Greek."

"In the crown of his cap,
Were the Furies and Fates,
And a delicate map
Of the Dorian States,
And we found in his palms, which were hollow,
What are frequently in palms—that is dates."

OUR FACULTIES.

Each of the following articles has been written by a student belonging to the Department he describes:—

FACULTY OF ARTS.

The most important event which has occurred in this Faculty, during the past year, has been the advent of the Rev. Professor Murray, formerly of Queen's College, Kingston, to fill the chair of Mental and Moral Philosophy and Logic, rendered vacant by the decease of the late Professor Forbes, Professor Murray came here with a high reputation for scholarship; this reputation he has fully sustained by his courses of lectures, and to which he has added in the eyes of the students who have come under his instruction, by his genial and courteous treatment of them.

We enjoyed, in the earlier part of the session, the privilege of listening to a course of lectures on "Early English History," from Goldwin Smith. Although his treatment of the subject from the lecturer's reputation which might have been expected yet the lectures were not only interesting, but very instructive.

All the members of the graduating class are pursuing honour courses, and as in some of these with considerable anxiety, not only by the competitors, but by all the students. This fact speaks well for the scholarship of the class, and will add much to the interest of Convocation. At that time the valedictory will be delivered, on behalf of the graduating class, by Mr. D. C. McLeod, of Prince Edward's Island, and they will go forth from their Alma Mater with the best wishes of their fellow-students for their success in the vocations they may severally choose.

The number of students attending the lectures of the Faculty is 111, being an increase of about 20 on the number of students attendant last session. This increase is gratifying, and we hope that, at the close of next session, we may have to report a still larger increase in numbers.

DEPARTMENT OF APPLIED SCIENCES.

CIVIL ENGINEERING.

This department seems to demand a special share of attention, on account of its recent commencement, and as there is now, for the first time, a graduating class, who take the degree which it confers. The course extends over three years, and has been attended by 28 students during the past winter. A considerable number of the subjects taught, such as Mathematics, English, French and the Natural Sciences, are the same as those in the Arts course, so that for these the Engineering students attend the ordinary lectures delivered to the students in Arts. The remaining lectures, namely, those on the various branches of the profession, are delivered by Professor Armstrong, who holds the degree of Master of Arts from Christ's College, Cambridge, and that of Civil Engineer from King's College, London. He has had several years' experience in practical engineering work in England, and his thorough qualification for the position he occupies is well known to those who attend his classes.

The lectures are so arranged as to occupy the morning hours. The afternoons are mostly taken up with the several branches of mathematical drawing and designing, in which also the students work under the superintendence of Professor Armstrong. During the Autumn months, two or three afternoons in the week were occupied in practical surveying. An accurate survey of the college grounds and adjoining city reservoir was thus obtained, from which a plan was afterwards made by each of the students. For the purposes of surveying, there are several valuable instruments of the newest construction, together with chains and other necessary appliances. The course of instruction given is thus seen to be one which unites both theory and practice; and the results which flow from such a course, when combined with ability on the part of the student, will soon be evident to all who choose to watch the career of those who are now graduating.

MINING AND METALLURGY.

If there is any truth in the generally received idea that valuable mineral deposits are of more frequent occurrence in the older geological formations, too much importance cannot be attached to this course of instruction in a country that contains such vast areas of Laurentian and Palaeozoic formations as Canada does. The professional lectures on these subjects are delivered by B. J. Harrington, B. A., Ph. D., who acquired the requisite mastery of his subjects by an exhaustive course of

study at the Sheffield School of Science, New Haven, followed by protracted visits to celebrated centres of mining industry in the States and Great Britain. Dr. Harrington also holds the honorable position of Chemist to the Geological Survey of Canada. He lectures on Chemistry in the Faculty of Arts, and also instructs the mining students in the approved methods of assaying economic minerals. The rest of this course for the degree of B. A. Sc. embraces a large portion of the engineering lectures and work under Professor Armstrong, and the lectures in Arts that are prescribed for engineering students.

FACULTY OF LAW.

In the Faculty of Law, the number of matriculated students was forty-one, thirty-seven of whom presented themselves for examination: in the first year, fourteen; in the second, twelve; and in the third year, eleven.

The course of study includes the Civil Code, Civil Procedure, Roman Law, International Law, Criminal Law and Procedure, Evidence, and Medical Jurisprudence. The degree granted is that of Bachelor of Civil Law.

The Elizabeth Torrance Medal was this year awarded to Matthew Hutchinson of Halifax, first in an examination extending over the whole course. Those who passed for degree of B.C.L. (alphabetically arranged) were:—

Duncan E. Bowie, Amedée Chaurét, Lewis W. P. Coutlee, Joseph Desrosiers, Matthew Hutchinson, Louis C. Leboeuf, James Lonergan, Frank H. Macdonald, Raymond Prefontaine, Henri B. Rainville, Camille Sautoire.

The general ranking of the students was as follows:—
FIRST YEAR.—1st, Hutchinson, first in five classes, second in one; 2nd, Desrosiers, first in two classes, second in one.

Honourable mention.—Coutlee, first in two classes; Bowie, second in three classes; Prefontaine, first in one class and second in one; Chaurét, first in one class; Rainville and Lonergan second in one class.

SECOND YEAR.—1st, D. Major, first in two classes, second in one; 2nd, G. E. Jenkins and A. Labadie, first in two classes.

According to the aggregate number of marks, D. W. R. Hodge, second in four classes, was equal with Major. The others who deserve honourable mention were, H. Archambault, first in one class; E. A. Panet, first in one class; O. Labadie and F. X. Choquette, second in one class.

FIRST YEAR.—1st, Augustine Hurd, first in three classes, second in one; 2nd, E. Coiffard, first in one class, second in one. Honourable mention.—D. Desjardins and R. W. Huntington, first in one class; J. S. Hall, second in two classes; W. Gallbraith and C. H. Stephens, second in one class.

FACULTY OF MEDICINE.

The past session has been prosperous, not only for the great number of freshmen, the largest that has ever yet entered (notwithstanding that a Faculty of Medicine in connection with Bishop's College has been started), but also that we have been able to occupy the new building erected for, and presented to, the Faculty of Medicine by the Governors of the University.

During last summer the Faculty suffered a great loss in the death of Dr. Fraser, Professor of Physiology. Dr. Drake, Professor of Clinical Medicine, has been raised to that chair, and G. W. Ross, A. M., M. D., a gold Medalist, not only in Medicine, but also in Arts, has taken the chair vacated by Dr. Drake.

The Holmes Gold Medal was carried off this year by Mr. Kelly of Durham, Ont., a great favourite with all the students, both on account of his talents and his pleasing address. Mr. Alguire of Lunenburg, Ont., carried off the Final prize. It may be well to mention that Mr. J. F. Shepherd took the Primary prize, and Mr. D. Alguire was second. This year their positions are reversed. The Botany prize was taken by Mr. Benson. The students have had a great honour conferred upon them by Mr. T. James Claxton, the well-known merchant and President of the Montreal Central Y. M. C. A., who gave a dinner to the Graduating class, as an acknowledgment of the gentlemanly behavior of the Medical Students of McGill University.

MEDALS.

It will be noticed in our list of Graduates in Arts that they all passed with honours. The reason why the medals are not given in that list, is that two of the candidates, Messrs. Macdonald and Ritchie, competing for the Chapman Gold Medal, were declared equal, and at the time of the insertion of the list it was still undecided to whom it should be awarded.

THE UNIVERSITY LITERARY SOCIETY.

This Society has been in existence for about five years, during which time it has had to contend with various difficulties, all of which have been surmounted; and to-day the success of the Society seems assured.

Its membership, about sixty, is drawn from the graduates and under-graduates of the three Faculties of the University.

The meetings of the Society are held in the rooms kindly furnished by the Mercantile Library Association. The Association also admit the members of the Society to the privileges of their Library and Reading-Room.

The exercises of the ordinary meetings consist of a reading, an essay and a debate. The debates during the past session have been of a very interesting and lively character, and mostly bearing upon the great questions which have been agitating the public mind in our own and other countries. Many of the papers read before the Society have been marked by much originality and ability.

Since the formation of the Society a large number of public meetings have been held, which have been well attended by the citizens. Only one has been held this session. The question then discussed: "Was a Federation of the British Empire desirable and practicable?"

The Society has earned for itself a name of which its members may be proud, in the public spirit that they have shown in providing for the citizens of Montreal a course of lectures and readings which must bear fruit in the improvement of our literary taste.

The Society seeing the absence of action on the part of other societies, financially much stronger than itself, determined not to lose the opportunity of the presence on this continent of an unusual number of eminent men from the mother country. Professor Tyndall with many regrets was compelled to decline the invitation, having at an early date to return to England. The Society had engaged J. A. Froude, the eminent historian; but he, on account of sickness in his family, was compelled to return home. But Professor Pepper, who has done so much to popularize chemical science and to present scientific truths in their most attractive aspects, delivered a course of five lectures under the auspices of the Society, and with very gratifying results. Mr. Edmund Yates, one of the Princes of the Pen, followed, and gave two lectures in the month of February on the "British Parliament" and "The Princes of the Pen." J. M. Belcher, who of all chamber orators perhaps holds the most prominent position, gave a course of three readings. Also George Macdonald, LL.D., whose name has almost become a household word, has delivered two lectures during the present week, called "Burns" and "Hood." The Society has partly made arrangements to bring on Chas. Reade and Wikkie Collins next year. These lectures and readings have been well supported by the public, and the Society has seen some reward in the manner in which Montreal has responded to their efforts.

In order to place an undertaking of this kind on a firm financial basis, and in order to insure success, a number of our influential and wealthy citizens were appealed to, and the appeal was not made in vain; for right nobly have these gentlemen seconded the efforts of the University Literary Society, and success has been the reward.

Several wood cuts have been promised us, which will beautify our sheet very much next session. The wood cuts referred to are of a character such as are strictly in keeping with that of the "University GAZETTE." Next session, commencing in September, '73, the History of McGill College will be given as taken by permission of the author from "McGill College and its Medals," a work which Mr. A. Sandham has just completed, and of which there are but a few copies printed. The work is beautifully illustrated with photographs by Notman.

As all cannot possibly obtain the book, Mr. Sandham has kindly given us permission to print such portions of it as relate to the History of the College. It will be complete in the numbers of the GAZETTE as issued during next session.

We hope that all the students will canvass for this paper during the vacation, so that in the autumn our subscription list will be such as to enable us to enlarge or otherwise improve the GAZETTE. Remember the subscription is only one dollar per annum, which is to be paid at the opening of the session in September. We also expect our students to assist us by procuring a quantity of original matter, which may be in hand at the commencement of next session.

GRADUATING CLASSES IN ARTS AND
ENGINEERING.

The following is the list of Graduates in the Faculty of Arts,
who have this day received degrees:—

PASSED FOR THE DEGREE OF BACHELOR OF ARTS.

(A) McGill College.

IN HONOURS.

(Alphabetically arranged.)

Allan, James Glen, Locke's Island, N. S.
Fleet, Chas. J. R., Montreal, Q.
Macdonnell, Richard L., Montreal, Q.
McLeod, Duncan C., Uigg, P. E. I.
Murray, Charles H., Montreal, Q.
Reddy, Herbert L., Montreal, Q.
Ritchie, Arthur F., Montreal, Q.
Tunstall, Simon J., Montreal, Q.

(B) Morrin College.

ORDINARY.

Cassels, Hamilton, Quebec, Q.

PASSED FOR THE DEGREE OF BACHELOR OF APPLIED SCIENCE.

(1.) Course of Civil and Mechanical Engineering.

(In order of relative standing.)

Stewart, Donald A., Whycomogah, N.S.
Wicksteed, Henry K., Ottawa, O.
McLeod, Clement H., Broad Cove, N.S.
Brodie, Robert J., North Georgetown, Q.
Kennedy, George, M.A., Montreal, Q.

(2.) Course of Mining and Assaying.

Tortance, John Fraser, Montreal, Q.

ADVERTISEMENTS.

JUST PUBLISHED.

The Story of the Earth and Man.—By J. W. Dawson, F.R.S., Principal and Vice-Chancellor of the McGill University, Montreal. (Hodder and Stoughton).—Geology as a science must always prove attractive; its study reveals the highest ends, and the facts, suggestions, and conclusions it evolves enlarge and discipline the mind. The several chapters of this treatise were originally prepared for, and appeared in, the *Lecture Hour*; and now that they are gathered together, and reproduced, with their illustrative diagrams, they make an exceedingly useful volume—a volume containing an epitome of all the theories from time to time advanced, and the modern arguments peculiar to this many-sided and important subject. The author's method is admirable for its simple straightforwardness; for, while he avoids such technicalities as are likely to confuse the unscientific reader, he leaves nothing untouched which is necessary to a fair—not to say complete—comprehension of the whole science. With commendable reticence, Dr. Dawson has left un-discussed the relation of scientific geology to the Mosaic account of the creation of the world; but on this branch of the subject he has previously written in his "Archæia," and, therefore, the less need to go over the ground a second time. All, however, will agree with him, that geology, to be really useful, must "be emancipated from the control of bald metaphysical speculation, and delivered from that materialistic infidelity which, by robbing Nature of her spiritual element, makes science dry, barren, and repulsive, diminishes its educational value, and even renders it less efficient for purposes of practical research."

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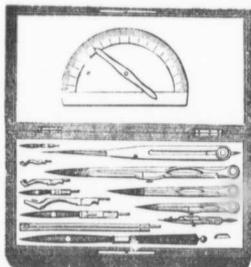
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