

*Photogravure*

*John Andrew & Son, Boston*

*Andrew Fernando Holmes, M.D., L.L.D.*  
*1798 - 1850*

*From a Painting in the Medical Faculty Room, McGill University.*

THE  
MCGILL UNIVERSITY  
MAGAZINE.



Vol. IV.

No. 2.

MAY, 1905.

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MONTREAL:  
A. T. CHAPMAN.

THE  
MCGILL UNIVERSITY  
MAGAZINE



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GAZETTE PRINTING COMPANY,  
MONTREAL.

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[All articles and other literary communications should be addressed to the Editor-in-chief, 802 Sherbrooke Street, Montreal, or to the Secretary, Royal Victoria College, Montreal.]

# THE MCGILL UNIVERSITY MAGAZINE.

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(The Editorial Board regrets that the publication of this issue of the MAGAZINE has been delayed owing to circumstances which lay beyond its control.)

The Faculty of Medicine has just resolved, without a dissentient voice, to incorporate itself with the University. As is well known, there was a time when the whole teaching activity of the University was confined to that Faculty and the University saved from vexatious and dubious legislation, and possibly from the reversion of the bequest of James McGill to his heirs, through the existence of a prosperous Medical School. At a meeting of the Governors of McGill College held at Burnside House on June 26th, 1829, a connection between the Montreal Medical Institution and the College was formally sanctioned. The account of the meeting as recorded in the official minutes, ends with a paragraph which gives the terms of the agreement and which, in view of the important and we believe salutary, action now taken by the Faculty of Medicine, will bear repetition, if only to show the beginning of a relationship that has never been broken. It reads as follows:

“The public business having been closed, the Governors of the Corporation held an interview with the members of the Montreal Medical Institution who had been requested to attend the meeting for that purpose. During this interview it was resolved by the Governors of the Corporation that the members of the Montreal Medical Institution (Dr. Caldwell, Dr. Stephenson, Dr. Robertson, Dr. Holmes) be engrafted upon the college as its Medical Faculty, it being understood and agreed upon by and between the said contracting parties that until the powers of the Charter would be altered. one of their number only should be university professor and the others lecturers. That they should immediately enter upon the duties of their respective offices. All of which arrangements were agreed to.”

(Signed)

J. STEPHENSON, M.D.,

Registrar of the University.

Since the year 1833, the date of the conferring of the degree of Doctor in Medicine and Surgery upon McGill's first graduate, William L. Logie, who was "deliberately examined in the different branches of science connected with Medicine and Surgery," and who "satisfactorily defended before the Medical Faculty, his inaugural dissertation on croup," the Faculty of Medicine can point to a career which, owing to the devotion of its members—devotion exhibited not only in quality of teaching, but also in tenacity of purpose—has become conspicuous in the medical annals of this continent. To enter into details concerning the shifting abode of the Faculty—now in Place d'Armes, now in St. George's Street, now in the Arts Building of the University, and now, and finally, in Coté Street before permanent removal to the University grounds—would, in itself, necessitate a lengthy article. The history of the Medical Faculty which, as might be expected, is a record of vicissitude and success, forms the subject of a number of articles by Dr. Maude E. Abbott, in *The Montreal Medical Journal* for August, 1902, to which the interested reader desirous of further information may turn. Both University and Faculty are to be congratulated on this newest order of things. An expressed desire for closer union—it matters not from what source it comes—refreshes and strengthens those who cherish the broad purpose that should actuate University endeavour.

It is probable that before the MAGAZINE is published, arrangements will be completed for the amalgamation of the medical schools of Bishop's College and McGill University. The union, if it can be brought about, is in every way desirable. There is scarcely any medical school—it may be doubted if there is one—which, with the rapid increase of medical and surgical knowledge, and the necessity of constant tutorial supervision, can declare it possesses adequate means to fulfil all the obligations of medical training to the individual student. If there is any goal that ought to be kept in view in university matters it is centralization, in so far as that is attainable. A large manufacturing and shipping centre like Montreal shows to advantage as a clinical field, it is true, and its Protestant hospitals may exhibit a sufficient number of clinical cases to meet the requirements of two Protestant schools of medicine. But the Protestant community of Montreal, or, indeed, of the Province, is not rich enough to keep two schools of medicine abreast of the time. In the interest of both progress and full efficacy of private benefaction, it is to be hoped that the advances made to McGill by Bishop's will result in a union altogether satisfactory to both parties. For a school which has an honourable history to be-

come conscious that it is better, for the sake of medicine, to lose individuality and enter a larger brotherhood than to struggle against growing difficulties, displays a spirit which ought to be similarly met.

A recent English historian, who, in the opinion of a distinguished French contemporary, turned whatever he touched into gold, was fond of distinguishing the Eastern Question as eternal. The epithet might be not unfittingly applied to the question of the relation of the partial student to the University. The partial student is a never-failing theme for discussion, and scarcely a Session passes in which he does not figure in debate. By some he is regarded as a weakling, or as an interloper bent on winning prizes and distinctions in competition with more heavily burdened and consequently unequally matched competitors; in fact, the view is now and then maintained that a university ought to exist for undergraduates alone. Only a short time ago the Faculty of Arts took action regarding partial students, with the result that the session which has just ended shows a marked falling-off in their number. After deliberation, the Faculty resolved to exact certain requirements of all partial students and, failing the presentation of satisfactory certificates, to examine those who wished to take partial courses and who, at the same time, had not passed beyond the limit of school years. The schools of Montreal and its neighbourhood were understood to have a grievance against the University because of its proving a counter attraction strong enough to militate against the completion of the school course, and accordingly the Faculty took, and wisely took, the step it did with the object of giving the schools free play, and of largely restoring a condition of things which existed formerly. In our opinion the partial student is rather to be encouraged than ignored. There is something wrong with all Faculties, and especially with the Faculty of Arts, if they do not include partial students in all branches of their work. The argument really turns on the quality and aims of the partial students themselves. If they come to the University qualified to take advantage of the instruction they seek and display sustained effort in their work, they ought to be welcomed as giving proof that the University is attractive and is making its influence felt beyond the restricted area of undergraduates. Perhaps, too, they contribute their share in preventing a university from indulging in the too comfortable feeling of the parochial minister who is "at his Hercules' pillars in a warm benefice." On the other hand to prevent the regulation just mentioned from excluding earnest students and at the same time to keep in force what the Faculty deems essential, the conditions of entrance have more recently been relaxed, so that anyone who is desirous of taking partial courses and who has reached the age of seventeen—



which may be regarded as marking the end of school life — can now enter the University classes without examination or certificates, except in subjects in which, for satisfactory class work, a certain amount of preliminary learning is indispensable.

In the course of the session that has just ended the Faculty of Arts has endeavoured to attract a class of partial students of the character to which reference has just been made, and also to draw the University into closer relation with the teaching community of the city. The fee for partial students in the case of graduates of the McGill Normal School who are actively engaged in the work of teaching, was lowered, and at the same time the lecture hours of classes likely to prove attractive were changed to the late afternoon in order to suit the convenience of teachers. The step has proved successful. A small band of teachers has been attending classes, mostly in literary subjects, with marked regularity. The Faculty intends to follow up this effort. During the next session the Department of English will repeat the courses that were specially arranged last year. In addition, courses intended especially for teachers, but also open to the general public, will be given in French and German Literature and Composition. The lectures on French subjects will be delivered in French; on German subjects, in German. The Department of History will also prepare a special course of lectures to be delivered twice a week. It may be confidently expected that this enlargement of the scheme will result in the increased attendance of the class of students for whom the courses are designed, particularly as the fee has been still further lowered.

Notice has already been taken in the MAGAZINE of the short course of four popular lectures given by the Department of Philosophy last Session. They lent additional variety to the work of the University and were attended by audiences both interested and sufficiently large to satisfy the Department that it had taken a step which should be made permanent. As the Department had signified its intention of giving a second course in the forthcoming session, if acceptable to the University, and had been in consultation regarding its details, the committee appointed to consider the question of popular lectures recommended the Faculty of Arts to accept the offer of the Department of Philosophy for next year, although it is understood that after next year such popular lectures will be distributed among the various Departments of the Faculty.

The work which the affiliated colleges in British Columbia are doing grows apace, and suggests the possibility of still closer connection with the University. At present they send a body of students to our

Faculty of Arts, some of whom begin their undergraduate course in McGill, while others, again, complete it by taking our third and fourth years. A scheme by which members of the staff of Vancouver College are granted leave of absence for a year in order to reside in Montreal and become familiar with the newest university methods, has been so far carried into effect that the classical instructor of that college, who is a gold medallist of McGill in Classics, did tutorial and research work in the University during the whole of last Session. The desire of securing enlarged connection in any of its aspects must, of course, come from British Columbia, and quite spontaneously; if it does, McGill, true to its belief in the nationality of education, will be ready to welcome it and to confer as to the best means of effecting a greater community of work.

The announcement by the Faculty of Applied Science that a limit must be placed on the number of students entering the Faculty next September, betrays a condition of things for which a speedy remedy ought, if possible, to be found. That the deserved reputation of a Faculty should bring it into a state of perplexity owing to the fear of being overcrowded is enough to check the ambition of those who have laboured to make it what it is known to be. There is of course a remedy always at hand. The fees can be raised until a workable adjustment of means to ends is reached, which implies that a university is forced to renounce a portion of its duty to the state, to say nothing of its duty to its instructors. A university ought to keep an open door for any student of ability and application instead of telling him to go elsewhere because of lack of room.

# ANDREW F. HOLMES, M.D., LL.D.

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1797-1860.

In the early annals of McGill University there is no name to which greater interest and importance attaches than to that of Dr. Andrew Holmes, first Dean of its Medical Faculty. One of the pioneer founders of the Montreal Medical Institute, a devoted and indefatigable servant of the Medical Faculty during the early years when its activity was absolutely essential to the continuance of a University which otherwise existed only in name, the founder and cherisher alike of the Medical Library and of the Museum, outliving his colleagues and dying in harness, as it were, after the future of the University under the wise direction of Sir William Dawson was at last assured,—Dr. Holmes is inseparably bound up with the rise and progress of the University of McGill College.

Andrew Ferdinando Holmes was the son of English parents, but was born in Cadiz, to which port his parents had been taken as prisoners of war in a vessel captured on its way to Canada by a French frigate in the year 1797. In 1801 the family reached Canada, and settled first in Quebec, and a few years later in Montreal. Here the boy received an excellent classical education at the hands of the well-known Dr. Alexander Skakel, whose Grammar School presented the nearest approach to the higher education at that time available for the English speaking portion of the community.

In 1811 he was articled as a pupil to Dr. Arnaldi, a leading physician of the time, and in the year 1813 or 1814 he left for the University of Edinburgh. Here, in company with Dr. John Stephenson, his friend and later his life-long co-worker in the McGill School, he pursued his medical studies and graduated in 1819, having first obtained his Diploma as Surgeon from the Royal College of Surgeons in 1818. During the year 1818 he was also admitted a Member of the Royal Physical Society of Edinburgh and on the 12th July, 1819, in anticipation of his leaving the city, he was chosen an Extraordinary Member.

During their four or five years residence in Scotland Dr. Holmes and Dr. Stephenson made opportunities to travel abroad, and to visit the schools and hospitals of Dublin, London and Paris. In Edinburgh, they

were known as ardent and conscientious students. Dr. Holmes, especially, was an untiring worker, devoting himself alike to his professional studies and to the kindred pursuits of Botany, Geology and Mineralogy. He brought back with him to Canada as the fruits of these early labours an extensive herbarium of the flora of Edinburgh, and a rich mineralogical and geological collection, the nucleus of the large "Holmes Collection of Minerals," which may be seen to-day, catalogued and labelled by the donor's own hand, in the Peter Redpath Museum.

About the year 1820 he began practice in Montreal. He was for the first five years in partnership with his old teacher Dr. Arnoldi, and later continued alone until his death. In the comparative leisure of his early years in practice he was able to devote much time to his favourite pursuits in Natural History. A herbarium of some 500 plants gathered in the years 1821 and 1822 in Montreal and its vicinity, representing the complete flora of this district, lies now in the Redpath Museum. A catalogue of these specimens, "Canadian plants in the Holmes Herbarium in the cabinet of the University of McGill College," prepared by Dr. James Barnston and published in the Canadian Naturalist in 1859, is also to be seen there. It is of much interest to the local antiquarian, for each specimen carries with its botanical name and synonym the date and place where it was found. The following for instance are suggestive entries:—

*Viola striata* (pale violet) May 13th, 1821. Swamp, St. Denis St.

*Rumex obtusifolium* (bitter dock) July 13th, 1821. Ditch near Beaver Hall.

*Amaranthus hypochondriacus* (prince's feather) September 27th, 1821. Roadside, Bleury Street.

*Clematis virginiana*, August 20th, 1821. Below Hallowell's House.

In 1827, Dr. Holmes, with some other scientific gentlemen, founded the Natural History Society of Montreal and for years he was one of its leading spirits, acting in turn as corresponding member, as Curator and finally as President. He himself catalogued its mineralogical collection, a laborious task.

It is easy to understand that in returning thus to Canada from what was then the leading medical school in Europe, two young men like Dr. Holmes and Dr. Stephenson, equipped with a breadth of education which would satisfy the best ideals to-day, strongly felt the lack of a good medical school in this province. Already in 1822 we find their announcements of lectures in the "Montreal Gazette," Dr. Holmes giving a course on Chemistry at the house of Dr. Skakel, Dr. Stephenson on Anatomy and Physiology at the Montreal General Hospital. In the

year 1822 also, this, the first Protestant Hospital in the city, was formally opened to the public. Drs. Robertson, Caldwell, Stephenson, Holmes and Loedel were its attending staff, and they appear to have utilized from the first the clinical opportunities which the Hospital afforded. In the autumn of 1823 Dr. Holmes and Dr. Stephenson were appointed by the Medical Board of the Hospital to draw up a statement of the great need that existed in the city for a good medical School, and were ordered to submit the same with a plan of the proposed lectures to His Excellency the Earl of Dalhousie for his consideration. Their scheme having been approved of in the highest quarters, the "Montreal Medical Institution" was organized in the following year. This body was never chartered, but a commission was granted to the members of its Teaching Staff, appointing them Examiners for the Licence in the Province of Quebec, so that in this way their status as individual teachers was formally recognized.

The first lectures of the Montreal Medical Institution were given at the house of the Institute, No. 20 St. James Street, as follows: Chemistry and Materia Medica by Dr. Holmes; Anatomy, Physiology and Surgery by Dr. Stephenson; Midwifery and Diseases of Women and Children by Dr. Robertson; the Principles and Practice of Medicine by Dr. Caldwell. Dr. Holmes is said also to have lectured in Botany and Pharmacology.

In the year 1829 a crisis in McGill University arose. At this time the University existed only in name, a purely nominal Board of five professors, who did no active work, having been appointed in 1823. Protracted litigation with the heirs of the Hon. James McGill still kept both money and land out of the hands of the trustees of the Royal Institution for the Advancement of Learning. On the other hand the time limit of the will made it absolutely necessary that some actual teaching should be done within the University in order to preserve to it the bequest of its founder. To solve this dilemma it was, that the Montreal Medical Institution, now an active teaching body of established reputation, was merged into the University, its teaching staff becoming "engrafted upon" it as its Medical Faculty. This happened at the first meeting of the Governors of "Burnside University of McGill College," June 29th, 1829. For some years later the only work done in the University was that carried on in this Faculty.

Under this new arrangement Dr. William Robertson, who with Dr. Caldwell was a senior member of the Teaching Staff, became Professor, and his colleagues, Lecturers, in a chartered University capable of granting degrees. In the year 1835 Dr. Archibald Hall was associated with

Dr. Holmes as his assistant in the chair of Chemistry and *Materia Medica*, and in the following year the subject of *Materia Medica* was placed entirely in the hands of Dr. Hall. In 1842 on the retirement of Dr. William Robertson, Dr. Holmes was made Professor of the Practice and Principles of Medicine. In the year 1844 too, he took up Dr. Robertson's work as official head of the Faculty, and at its re-organization in 1854 he was made its first Dean. The duties of the diaconate he had thus long been discharging with fidelity, and he had added to them the voluntary duties of treasurer, registrar and librarian, besides looking after all the economic arrangements within the College. The Library owes its very existence to his fostering care, while the Pathological Museum was his cherished object and contains to-day specimens of rare value donated by him. The finances of the University were so closely looked after by him that at his death, which occurred unexpectedly, the accounts balanced to a sixpence.

In preparing his lectures also, Dr. Holmes spared no pains. His effort always was to bring his material up to date and to give his hearers a critical survey of the most recent views upon his subject, and to this end he was an indefatigable student, working far into the night. "Few," says a biographical note, "have longer burned the midnight oil." His style in lecturing is said to have been too detailed and conscientious to have been brilliant or even absorbingly interesting to his hearers, but every word that he gave them was of value, and his lectures were literally compilations of research matter. Dr. Holmes was the author of no large work. But scattered through the contemporary journals are many articles from his pen written in a polished style and in classical English, and based on such an accurate and discriminating observation of facts that they remain of standard value to-day.

With the Montreal General Hospital he was connected from the year 1823 until his death. After twenty years as an attending physician he retired on the consulting staff, to make way for a younger member of the profession.

In 1853 he was elected President of the College of Physicians and Surgeons of Lower Canada and he held this office for the usual period of three years. He was a member of the following societies:—Extraordinary member of the Medico-Physical Society of Edinburgh, (1819); Non-resident member of the Wernerian Society of Natural History of Edinburgh, (1820); Corresponding member of the Lyceum of Natural History of New York, (1825); Corresponding member of the Medico-Chirurgical Society of Edinburgh, (1823); Member of the Natural History Society of Montreal, (1827); Member of the Connecticut Academy of the Arts

and Sciences of New Haven, (1839); and Corresponding Member of the Literary and Historical Society of Quebec, (1830).

In his practice Dr. Holmes was much beloved, alike by the private families whose interests he served in the same spirit as he did the School he loved so well, and as a consulting physician. He was characterized (to quote again from the beautiful obituary notice in the *British American Journal* for 1860) "by sound judgment and acute discrimination and his opinion as a consultant was eagerly sought as one upon which reliance could be placed. He was sensitive to the amenities of the profession and spurned the advantages which his consulting practice offered him. He was therefore the friend and confidant of the younger members of the profession in this city who had no hesitation in confiding to him their doubts and difficulties. His footsteps will be missed in many a private family for his patients regarded him with feelings of the fondest affection."

Dr. Holmes's most striking characteristic is said to have been a strong religious feeling, which he carried into every department of life. He lived always, say the contemporary journals, as though he were in the presence of his Maker, and he carried an abiding sense of the presence of God into all the relations of his many-sided life. To quote again from the obituary notice: "He was emphatically the Christian gentleman. Few have worked harder than he for the advancement of Science in this City and Province, and few have associated with these labours a more sincere recognition of the Author of those works which he felt an especial delight in studying and in revealing."

He died in his 63rd year very suddenly, of fatty degeneration of the heart, on the evening of October the 9th, 1860, while in the act of writing out notices for a meeting of the Faculty which he was about to call. It seemed in keeping with his active devoted life that at the time of his death the Medical School had passed through its most critical period, and the University itself had found a pilot to better days in the person of the late Sir William Dawson. Dr. Holmes formed a link between the early pioneer founders of McGill, and the comparative prosperity of to-day. He lived to see their work placed in great part as the result of his own untiring zeal, on a secure basis, occupying the position that he himself outlined in 1823, in the scheme he drew up for the consideration of the Governor in Chief, the Earl of Dalhousie, of the "reasons why a Medical School should be inaugurated in the City of Montreal."

At his death the members of the Faculty wore mourning for a month in memory of their deceased colleague, and in 1864 the Holmes Gold Medal, awarded for the highest aggregate of marks obtained in the

medical course, was established in his honour. Alfred Sandham writes in 1872 of this event as follows:—"The medal was founded by the Faculty of Medicine in 1864 in honour of the late Dean, Professor Holmes, than whom, it may be said, that no man ever lived more conscientiously and few have died more beloved. It is a most deserving and grateful tribute to the memory of departed worth, associated as it is with the name of one who was the Founder of the first medical school in Canada, and who for nearly forty years remained in connection therewith."

He was a slight, dark man, rather under medium height, slightly stooped, of quiet retiring manner. Much beloved by his colleagues and in his private relations, a scholar of no mean literary attainments, a scientific worker and collector, a naturalist of repute, the name of Dr. Andrew Holmes should have a far wider recognition than it has to-day. But the chief part of his great energy was expended in the interests of the Medical School he loved, and indirectly of the University of which it formed so essential a part, and their present status is his real and lasting monument.

MAUDE E. ABBOTT.



# THE PLACE OF THE UNIVERSITY IN A COMMERCIAL CITY.

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(An Address delivered before the Canada Club, Montreal,  
March 24th, 1905.)

This is to be—not an address—but an after-dinner talk. The trouble about it is that it has a title. Such talk, as you all know, is always about everything in general and nothing in particular. And after-dinner talk should never be left in the hands of one man. When such a thing happens, that man is always voted something of a bore. If I monopolize the conversation for a time to-night, you know you have only yourselves to blame.

And on looking at it again I find the title—since there had to be a title—a rather pretentious one for such a talk as I am about to give. But after all it only conceals one's natural inclination to speak to others about what interests one most. *The Place of the University in a Commercial City*. I know that University. There is no deception. They asked me to go down to St. Louis last year to give a ten minutes talk on *The University*, meaning the ideal University, the pattern of which—as Plato would have said—is laid up in Heaven. I couldn't go, but in replying I assumed—with a deliberate and calculated facetiousness—that they meant McGill.

There—the name will out! I understand that at your last meeting Mr. Hays was discoursing to you about the Grand Trunk Pacific. He couldn't keep away from it either! If you had got me to speak about railroading, and Mr. Hays to speak about McGill, I am sure you would have added to the gaiety of your evening's entertainment. You all know that our great railroads have lately become—through the action of Sir Thomas Shaughnessy and others—mere departments of McGill. We are talking now about getting a new building up at McGill for the Transportation School, and shall easily be able to provide accommodation for the Head Offices of both roads—the Grand Trunk and the Can-

adian Pacific Railways — under one roof. I ought to have brought a map with me. I am told Mr. Hays had one. It would have been quite the thing to take a pointer and show you McGill as it is to-day, and as I hope it will be, say, ten years after date. The only difference between Mr. Hays and me is that he has got all the money he wants for his new road, and I don't know which way to turn to keep McGill going even on present lines.

Well, as I said, I know the University; sometimes I am inclined to think that I know a good deal more about it than I want to. And you know the Commercial City, so between us we ought to be able to hit it off. I have done ten years now of life in Montreal; and all the time I have tried to keep in view that somewhat obvious fact that if university people have much to teach such a community as this, they have also something to learn from it. When we began work in the University College of Dundee, good old Principal Tulloch addressed us in words which I have always liked to keep before me: "Nowhere does the school of life afford a better training in the qualities of prudence, good sense, sagacity, keeping your own counsel and doing your own work without too much fuss than in a thriving mercantile community. No qualities can be more useful or wear better than these, and I fear it is possible to pass through any college, or even to teach in a college, without sometimes having a conspicuous share of them." You know too how Cecil Rhodes gently satirized the Oxford dons when he said that college people know nothing of affairs, and are "as children in finance." Well, that is not the danger from which we suffer up at McGill. We have to keep a pretty sharp lookout on our finance up there. What Sir John A. Macdonald called the two worlds of LL.D.'s and L.S.D. are not so far apart from each other up at McGill after all. For myself, I can say that my activities are so varied — I deal in so many different lines of goods — that I consider myself thoroughly qualified to become the managing head of any great departmental store. There is no fear of any one in my position, or with my duties, becoming what Lord Palmerston contemptuously called (speaking, by the way, of Germany) merely a "d——d Professor."

If I know the University, you know the City, and it is this that lends such a piquancy to our meeting here to-night. We Professors live up on the heights, and seldom find it necessary to go down town at all, except in the course of the arduous and unequal struggle to pay our monthly bills. You are down town all the time, engaged in acquiring a superabundance of dollars such as may set you free from all these anxieties. And then we meet. You have made your pile, and you want to consult me as

to what you shall do with it, or some of it,—what channel of benevolence and public spirit you should select in which to cause the golden shower to flow. Can there be any doubt as to my reply?

One of my colleagues who recently left Montreal to return to Kingston spoke, with much praise for McGill itself, of the “depressing unsympathetic plutocratic atmosphere” with which it has to contend in the city of Montreal. What can he have meant? Montreal prides itself on what it has done for its English-speaking University. Our existing prosperity is the result of the benefactions of various Montreal families and individuals, whom it would be superfluous here to mention. On the other hand, I could cite you the names of many citizens who, dying within the last ten years, have left millions of dollars behind them, without appearing ever to have given much thought to the higher interests of the community in which they had amassed their wealth. And what of the rank and file? Perhaps Professor Macnaughton meant that the rush of life and the scramble for a bare existence is so great in this city that many people have hardly the time to think of higher things. You know how powerfully he preached the gospel of culture, and how he protested against the view that the true end of education is to make money. Such a view cannot be accepted even for the professional departments which it is our duty as well as our interest to foster in a commercial community such as this. Perhaps all that Professor Macnaughton meant to plead for is a little more sympathy—on the part of all classes of society—with the work which McGill represents and with the workers who are carrying it on. On their behalf I shall venture to assert—and the future will prove my statement true—that not the least of the obligations which this community is incurring in connection with higher education to-day is towards that body of men who, with next to no margin of profit, after providing themselves with the necessaries of life, are content to toil on from year to year at the subjects with which they wish to have their names identified. College work, as we know it in McGill, is just about the most unremunerative service of modern times. I sometimes tell my colleagues that the one reward they are sure of is that—if everything goes well—they may have their names mentioned in the evening paper thirty years after date. A recent writer—who can speak with some authority on the subject—has gone so far as to say that the great fabric of higher education “owes its existence in great measure to the willingness of college professors to bear a great part of the cost.” Their salaries, small enough to begin with, show little disposition to keep pace with the increased cost of living and with the higher standard of attainment that is nowa-

days required of any one who offers himself for college work. "Preparation for college teaching," says the same writer,<sup>1</sup> "is more exacting than that for any other profession, medicine not excepted. The prospect of spending seven years in preparation, of working afterwards as an assistant for several years at a salary of \$700 or \$800, for several years more at a small advance, and of attaining at middle age a salary not much greater than the wages of a switchman in an eastern railway yard . . . . is by no means alluring to a man unwilling to remain celibate through life."

It seems to me that this is a condition of things which needs a little ventilation and discussion, especially in a community which affects to believe that its University is rich beyond the dreams of avarice. I do not know what harm may not have been done by the oft-repeated statement that McGill is amply provided for out of the abundant means of her wealthy benefactors. Individuals cannot be expected to do everything, no matter how wealthy they may be, and it is a very poor form of gratitude which suggests that they should be called on to do more. I look for an alleviation of present conditions in a more widespread appreciation throughout the community of the needs of our University, and a bridging of the gulf which sometimes exists between professors, as men and as workers, and the citizens among whom they are living and working. Meanwhile, it is well that I should take this opportunity of stating the fact: so far from being excessively rich, there are many departments, as I could easily show you in detail, in which Old McGill is *at a standstill*,—for want of money.

The explanation is, of course, to be found in the manifold variety of our present operations, and also — paradoxical as it may seem — in the very success which has attended them. That success itself creates new necessities. There never was any need for regarding universities as fashioned in the same mould, and the university in the commercial city has long ago overpassed the limits of the old Arts College. So much is this the case that our enterprising American friends have actually sought to establish a new connotation for each of the words *college* and *university*, different from that which has been in use in other countries. In cases where the designation of *university* is something more than merely a "majestic synonym" for *college*, it implies in America the presence of professional faculties. And the tendency in these professional faculties is to follow the example of Germany, and to insist on a college degree as a prerequisite for entrance.

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<sup>1</sup> Professor John J. Stevenson, on "The Status of American Professors," *Popular Science Monthly*, December, 1904.

We have not got that length in McGill yet, though a growing number of our students voluntarily take the Arts course first. But it has come to be the established system at Harvard for Law, Medicine and Theology; at Columbia for Law, and at Johns Hopkins for Medicine. The great danger at the present time is that the pressing demands of commercial life, and the intensely practical attitude which is forced as a consequence on American higher education, may interfere with the natural course of development along this line, and may result in an excessive curtailment of the period of academic training. Few who know the conditions of our own country will feel any surprise that so many of our young men have been in the habit of hurrying at once into the professional faculties without over-much preliminary education. The country had need of them, and they made haste to reach their goal. But there is less reason now — especially with a well developed Faculty of Arts — why McGill should continue to run the risk of turning out uneducated specialists. Those of you who know our medical student, for example, will not be sorry if he takes to heart the advice he is likely to get from Dr. Osler next month, and devotes a little more time than has been altogether usual hitherto as to the needs of preliminary training.

But I must not be understood to be saying a single word in disparagement of our professional faculties. It is one of the great discoveries of recent years that there is no reason in the nature of things why chemists and miners and engineers of all kinds should not be just as cultured as doctors and lawyers. And so their training has now a definite place in all broad university systems. Take our own Faculty of Applied Science, and the splendid record it has achieved within comparatively few years. We are looking for a great development in the prosperity of this department of our work. If it could be properly cared for now, it would become one of the greatest centres for such teaching on the whole American continent. With adequate accommodation, it could easily double the numbers of its students. As regards medicine, I am not sure that we have not already just about as many doctors as we want. What we need is a better training for the best of them. But there is practically no limit to the number of young men whose services will be called for by this great and growing country in the field of industries and manufactures. It will be with us just as it has been with Germany and the United States, where the phenomenal increase in the number of students enrolled in schools of technology and in university faculties of applied science during recent years, is a good index of the marvellous development of the scientific and industrial activities of both nations.

And yet there are some who profess to fear that we are over-educating our people. There might be some ground for this if we were seeking to drive all students into what used to be called the "learned professions." But, as to over-education in general, let Germany give its answer. It is calculated that in Germany during the last thirty years the number of men of university training (including schools of technology, mining, agriculture, forestry and veterinary science) has doubled itself. The industrial life of this country has gone on developing in close contact with its academic life. The practical undertakings of German captains of industry rest on a solid basis of scientific training. Nowhere has the truth more fully emerged that Law and Medicine and Theology are not now the only technical applications of academic studies. Germans recognize the fact that it is the abstract and theoretical learning fostered by the university that supplies the basis on which rest all the marvels of modern scientific activity. And no expense is spared to carry out the work. You have heard how the great railroads of this country have recently combined to found, in connection with our Faculty of Applied Science, a department of Railroad Engineering. But in Germany this sort of thing is going all the time. Take the manufacture of explosives. Rival concerns combined some year ago, knowing how much they depended on high science, to subscribe about half a million dollars, and to found close to Berlin an institution which they called their *Central-stelle*. This establishment, "maintained by subscription at a cost of about £12,000 a year, is presided over by one of the most distinguished professors of chemistry in the University, with a staff of highly trained assistants. To it are referred as they arise the problems by which the subscribers in their individual work are confronted, and by it is carried on a regular system of research in the field of production of explosives, the fruits of which are communicated to the subscribers." (Rt. Hon. R. B. Haldane, M.P.)

But with all this Germany does not make the mistake of forgetting the things of the mind. To show you where the danger lies here, I want to read you something which recently appeared in a Canadian journal. True, it has reference only to school education, but, after hearing the extract, you will ask yourselves what we may look for if such things are to be done in the green tree. *Canada First*, p. 10: "I visited once, some years ago, a high school in a little Ontarian country town, situate in the midst of a great stretch of beautiful and fertile soil, all of it arable, much of it wooded, and bordering on a bountiful and navigable lake. Its head-master told me, evidently with pride, that his upper classes were reading Plato's *Laches*, and Tennyson's *The Princess*, a

*Medley.* Some day, perhaps, some one will have the sense to substitute for Plato and Tennyson, tuition in intensive farming, scientific dairying, stock-raising, horse-breeding, poultry-keeping, fruit-growing and preserving, bee-keeping, pisciculture and fish-curing, and forest-conservation. I should think the sooner that day comes the better."

In opposition to this, let us not forget that intellectual advancement may well go hand in hand with practical activity. In Germany the application of the highest knowledge to commercial and industrial enterprise is not allowed to obscure the claims of pure culture. That is an end in itself, and if it is to be realized in its greatest perfection it must be sought in and for itself. In the schools of our Province, conditions would be worse than they are at present if the writer of the extract just quoted were allowed to have his way. What we need in our schools is not a longer list of subjects, but some method which shall secure that the pupils know a few things well. The instruction given should be more thorough and less diffuse. It saddens me to realize at times the contemptuous attitude of persons who think they know what ought to be taught in schools towards some of us who are professionally identified with teaching interests. The country districts, for instance, are jealous of the control which the university rightly claims to exercise over the whole school system of the Province. Not more than 5 per cent. of the pupils, they say, are going to the University; therefore the University should leave the 95 per cent. alone! Two points of view occur to me here: First, that so far as true education is concerned, the needs of the 95 per cent. are not really so different after all from the needs of the 5 per cent.; and, secondly, that the University which would seek to set up an impassable barrier, as regards entrance, between the majority of the scholars and the smaller remnants, in estimating the results of efficient school-teaching, would stamp itself as hopelessly out of date. But this is a subject which is more proper to the atmosphere of teachers' conventions than to this. I shall only repeat that the influence of a modern and well-regulated university ought to be allowed to permeate all strata of the educational fabric.

This reminds me to refer to the new outlook that has opened up for common school education in Quebec since Professor Robertson was authorized to make the announcement of Sir William Macdonald's benevolent intentions in regard to it. Let me here quote what has been appropriately said by one of my University colleagues — Professor Caddon of Queen's College, Kingston — in praise of our greatest educational benefactor: "His name will remain honourably identified in the minds of his countrymen with educational work in Canada when that

of many a politician now occupying much of the public attention will be mentioned only to illustrate the curious psychological features of the political corruption of the age." (*Queen's Quarterly*, January, 1905, p. 315.) Not the least important feature of the new order of things is the proposed transference of the McGill Normal School to Ste. Anne; and with the guarantee of continued University supervision and control of the work of training, I am sure that this change to improved conditions will be hailed with the greatest satisfaction by all who are interested in the educational progress of our Province. As to the new College of Agriculture, I cannot claim to speak with the same authority. It had always been one of my pious aspirations that the McGill Faculty of Comparative Medicine and Veterinary Science should rise again, as it were, from its ashes, and recommence work on a larger scale; and this need will, no doubt, not be lost sight of by the new foundation. It used to be said in Scotland that the path was well-trodden from the university to the farm-house. Sir William is engaged in building a road *back to the farm*, and when agriculture has been rendered increasingly profitable by the larger use of scientific methods, farming ought to become as attractive to our young men as other avocations are at present.

I had almost forgotten to say a word on another subject which has been recently much in my thoughts — the possibility of instituting a commercial course at McGill for young men who intend to follow a business career. Provided the standard of entrance could be maintained, it would be comparatively easy to add to the subjects of the first two years of the Arts course, which already includes such essentials as History, Modern Languages and Mathematics, teaching in Commercial Geography, Descriptive Economics, and so forth, leading to a diploma conferred in connection with our present Intermediate Examination. With the co-operation of employers, hours could also be arranged for further study in the succeeding years of the curriculum,—including Political Economy, Economic History, Accounting, Mercantile Law and Practice, Banking and Insurance, and the principles underlying successful business management. Such a department, centering around our School of Economics and Political Science, might provide more or less systematic training also in the methods of government and administration, in statistics and social investigation, in the study of the municipal system and the legislative control of industry and commerce. I am a believer in the possibility of inspiring, through education, that feeling of unity which is so indispensable in members of the same civic community, citizens of the same state, joint heirs of the same imperial heritage. Who can doubt, for example, that some of the problems that confront us in re-



gard to Imperial questions at the present moment, as well as those likely to develop under the surprising changes that are going on in the Orient, might be more efficiently solved if a greater proportion of our people were brought into intelligent touch with the interests which such problems represent? The self government on which we rightly insist should have a sound basis of education to support it. The relations of the British Empire to its colonies, and its best methods of dealing with foreign countries — such subjects are best understood by those who have made a special study of them, and especially those who have had already the advantage of gaining some instruction in such branches as Economic Science, Political and Commercial History and Commercial Law. Such a start has lately been made in the University of Birmingham, although that University is still without the two chairs of History and Economics of which McGill can boast. It should not be above our capacity to organize something of the same kind for Montreal. There are in this city, as in most other cities of the same size and importance, "men of business skilled in finance, in banking, in exchange, great organizers and administrators, experts in various lines of commerce," who might be willing perhaps, as visiting lecturers, to devote some portion of their time and energy to the training of our youth. Where that has been attempted elsewhere, the process has been found to be mutually beneficial, for those who undertake the task of instructing others soon realize that there are few things more truly educative than the attempt to put one's own ideas into conscious order and expound them to others.

To conclude:—Perhaps the most distinctive feature of the universities on this side of the Atlantic is their breadth of aim. They train for citizenship. They are not a thing apart as universities were in former days, remote from the life of the people. And they try to inculcate the duty of taking an interest in affairs, with the view of shaping public opinion and influencing public action. To quote Professor Macnaughton: "The Universities are here mainly to supply the nation with more light. No doubt it is also part of their business to provide men equipped to render to the community particular services requiring special knowledge and technical training. But their highest and most characteristic, their indispensable function, is the general and wider one, namely, to turn out men of disciplined intellect." To those who bear this truth in mind it must be obvious that the disparaging talk to which we have sometimes to listen in regard to old-world centres of education is not always well founded. For it must be admitted that tried by this test of the service they render to the nation, Oxford and Cambridge are not found wholly wanting. Though local conditions may seem to us, in

a great commercial centre, to impose limitations and restrictions on their work, the English universities can claim that they have helped to realize the aspirations of the *Bidding Prayer*, used every Sunday before the University sermon, "that there may never be wanting a due supply of persons qualified to serve God in Church and State." But it is more by influencing the privileged few than by getting at the masses of the people that they do their direct educational work. In the past their influence on the governing classes has been conspicuous. It is bound up with the residential system, which is so potent a factor in social training, and in the moulding of character. It was this, as well as his own connection with Oriel College, that turned Mr. Rhodes's thoughts to Oxford, though we know from his will that he might otherwise have preferred Edinburgh.

That brings me to the question of residences for our students, a pressing need, the supply of which would enable us to show that our interest in our young constituents does not confine itself to the lecture rooms and laboratories. Instruction is given there, but I do not know of any one who would hold that the class-room is a completely equipped field for the training of the character. In this aspect McGill is only a step-mother to her children. She leaves them, so far as residence is concerned, to find lodging where they may. The great gift of the Union or Club-house, now in course of erection at Sir William Macdonald's expense, will furnish a valuable counter-attraction to the cheap restaurant. But, as to residence,—if any of your members who have gone into the question of residential flats, built with a view to profit, would care to extend his interest in the subject to the needs of McGill students, I shall be glad to put him in the way of a good thing. At Oxford and Cambridge the residential system has been carried to such lengths in the course of centuries that the colleges dominate the University, which exists as a separate corporation only for examinations, degrees and other general purposes. Here in Montreal things began the other way on. The University is firmly established, but the interests of the whole student body would be greatly advanced if we could now provide residential halls, like the dormitories at Harvard, Yale and Princeton. To me it seems just about the least we could do, looking to the formation of character—and it is perhaps all the more incumbent on us as we are forbidden by our constitution to have any definite church connection. Religious zeal is forbidden to us as a corporation, and we have to substitute for it what the late Archbishop of Canterbury said would do equally well, the cultivation of a "quiet sense of duty."

That is a point which could be easily elaborated, but I shall leave

you to fill in the outline for yourselves. You know what difficulties and temptations beset a young man who comes up to reside for the first time in a great centre of population such as this. It is not creditable to Montreal, in my judgment, that she should plume herself on having a great University which aims at playing an important part in our national life, and yet show such an utter disregard for the comfort and social well-being of its students. Some may think that, like others, students should take their chances, and learn in the school of experience. For immature young men that is emphatically a "fool-school," and the cost of tuition is excessive. Many fall by the way who could, under healthier conditions, be guided over the stony ground.

I think that this question of residence should receive the earliest possible attention from the friends of McGill. In any event, I hope that I have shown that the operations of a great university should be of interest to all sections of the community in which it is striving to do the work. In order to be of direct service we must be in close touch with popular needs. I have no fear of being considered "utilitarian." It is quite possible not to lose sight of the humanities and yet be practical. The conditions of modern life require, in all departments, a higher training than has been necessary in the past. Education has come to be increasingly indispensable for the efficient discharge of the duties of citizenship. You know what a great uplift for the whole country is secured when its educational standards are properly set. Universities are on the side of enlightenment, progress and truth. And I hope you share my view that what a modern university has to offer in the midst of a commercial city, so far from disqualifying a man for success in business, ought to help him forward, just as is the case with the professions.

W. PETERSON.

# SOME PHILOSOPHICAL QUESTIONS SUGGESTED BY A STUDY OF BIOLOGY

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Philosophy is a subject in which we must all perforce be interested. We may not, it is true, call our philosophical ideas by that name, but everyone has to invent or adopt some working theory of his relation to the world in which he lives and of the meaning of the experience which flows in on him in a constant stream.

Now, most of the questions which are forcibly suggested to a student of biology would be raised by a deep and critical study of the simplest phase of experience, but they are raised in biology again and again and in such a persistent manner as to force an entrance into the most inattentive ear.

The first great problem which is raised for a biologist is the value of sensations as giving any real information of the nature of the world. Let us commence our study by the description of one of the simplest types of animal life. The animalcule *Paramecium* may be readily obtained by making infusions of animal matter. It is shaped somewhat like a bedroom slipper and progresses by means of vibratile hairs termed cilia scattered all over its surface. On what corresponds to the upper surface of the slipper, toward the toe, there is the gullet, a deep indentation lined by somewhat longer cilia, which penetrates through the tough outer layer of the animal into the semi-fluid interior. Food is swallowed by being whisked down the gullet by the action of these specially long cilia, and the animal whilst alive is practically in constant movement produced by the action of the cilia which cover the body.

Now, when *Paramecium* is observed through the microscope it appears to be guided by reason or at least instinct. It noses its way carefully amongst the masses of decaying matter in which it lives; it turns, retraces its steps, behaves like a dog scenting its prey. Nevertheless, when the conditions under which *Paramecium* lives are standardized and its supposed instincts subjected to the test of experience,

it can be proved that the supposed instinct or reason is a pure illusion, and that *Paramoecium* is as mechanical in its actions as a *Jack-in-the-box*. It can be shown that *Paramoecium* has but one answer or reaction to all kinds of experience — or, as we should phrase it in Biology — all kinds of changes in its environment. This reaction differs in intensity with the experience, but it is always the same in kind.

If, for instance, a drop of sugar solution be introduced into the water in which the *Paramoecia* are swimming, (and if this be done gently, the drop will not mix quickly with the surrounding water), it will be seen that the animalcules at first continue their movements totally unaffected. None bends in the slightest degree from the straight line of action as the molecules of sugar spread outwards from the top. But, finally one happens, in the course of its excursions to and fro, to pass into the drop; then when it has traversed the drop and is about to pass outwards into the water, the reaction is called forth. The animal stops, reverses the action of its cilia so that it moves backwards, then turns on its short axis towards the side on which the mouth is situated and continues its course as before. Soon it approaches the periphery of the drop again, and the same result follows, so that the animal remains imprisoned within the drop. Before long another straggler has passed into the charmed circle and in a short time the drop will be full of *Paramoecia*, which would be described by a superficial observer as having been attracted by the sugar, whereas careful observation shows that the animals happened to fall into the drop and are kept there by the fact that their reaction is called forth by the attempted passage from sugar to water.

If now instead of a drop of solution of sugar, one of a strong solution of salt be substituted we shall find that exactly the same chain of events is observed with this difference, namely, that the reaction is called forth when the animalcule impinges on the drop, not when it has passed through it and is endeavouring to emerge on the other side. The consequence is that the animal retreats from the drop, turns on its axis, and again advances in a direction making an angle with the former one. It may happen that the new direction is such that it will enable the *Paramoecium* to move past the drop; if not, the reaction is again called forth when the animal again touches the drop, and, after a few repetitions of this performance, the direction will be so far changed that the animal is able to get past the obstruction.

Now, although the reaction in this last case has the appearance of an intelligent attempt to avoid an obstacle, we have only to mix some potassium iodide with the culture to show that it is purely mechanical.

Potassium iodide has the property of prolonging the phases of a reaction, and when we observe the behaviour of *Paramecium* under these new conditions we find that when it impinges on a drop of salt solution, it stops as before, then retreats for a long distance backwards, then turns on its axis and continues turning until it has performed several complete revolutions, so that when the reaction is at an end and it resumes its forward movement the direction may be quite unaltered and, therefore, the whole reaction purposeless.

Now, all substances may be divided into two classes according to their effect on *Paramecium*. One class call forth the characteristic reaction when the *Paramecium* seeks to pass out of them, the other when the *Paramecium* enters them. Quite a number belong to both classes — acids, for example, acting like sugar when in dilute solution and like salt when in strong solution. The strength of the reaction varies with the substance employed, but its character is not dependent on the nature of the change in the outside world but solely on the nature of the *Paramecium*. Allies of *Paramecium*, such as *Stentor*, *Styloni-chia*, *Lacrimaria*, and so on, give each a different reaction under the same circumstances, but the character of the reaction in each case bears a relation to the structure of the animal producing it and none to the stimulus employed. Now, it is easily seen that the reaction of *Paramecium* is one which enables it to get along in its ordinary surroundings with tolerable comfort. It is to the advantage of the animal to stay near a nourishing substance till this is entirely consumed, and it is essential that it should avoid dangerous substances like strong salt or strong acid. *Paramecium* is enabled to penetrate into the structure of the Universe as much as is required for its needs but no further.

The same general principles hold as we ascend in the scale of life; the reactions with which the animal is endowed certainly increase in number, but still all these reactions depend on the structure of the animal which is acted on, not on the nature of the disturbance which calls them forth.

We may select one other case which has been fairly completely worked out by a distinguished physiologist, Baron von Uexhüll. The general appearance of the sea-urchin is, I think, fairly familiar to all. Its shape is that of a flattened sphere or, more properly expressed, of an oblate spheroid; it has a shell composed of closely fitting plates with two apertures at opposite poles, of these one is the mouth and the other is the vent. The animal is covered by long spines which are moveably articulated to bosses on the plates composing the shell. Amongst the the bases of the spines are large numbers of delicate organs, shaped like

pincers, each provided with three prongs mounted on moveable stalks, which are capable of closing suddenly and remaining closed for some time. Through holes in the shell are protruded a large number of delicate transparent tentacles which end in suckers. The animal moves, partly by attaching these suckers to the substratum and hauling itself along by contracting the tentacles, and partly by walking on its moveable spines as if they were stilts. The pincers are weapons of offence which grasp and hold tightly anything which would injure the surface of the sea-urchin, which is covered outside the shell with delicate soft sensitive skin.

Now the point which renders the urchin specially worthy of our attention is the condition of its nervous system, for this system seems to be in ourselves the seat of consciousness. In all nervous systems the essential element is the nerve-cell which is prolonged into an out-growth called the nerve-fibre. In man there are many kinds and sizes of nerve-cell, and they are massed chiefly in the brain, although there are a considerable number in the spinal cord, and smaller groups are scattered throughout the body. But in the sea-urchin these cells are spread approximately evenly under the whole of the skin outside the shell, although they are slightly aggregated round the bases of the spines and pincers. In addition to this uniform external layer of nervous matter there is a so-called central-nervous system consisting of a ring round the mouth from which radiate out five cords running like meridians towards the upper pole. These cords and the ring from which they proceed are situated internally to the shell, but they are connected to the outer nervous system by cords which accompany the tentacles in their passage through pores in the shell. Throughout the whole of the central as throughout the whole of the external nervous system, the same type of small round nerve-cell is evenly scattered; we have, in fact, a nervous system differentiated as to external form but not as to internal structure. It is, therefore, the simplest conceivable type of nervous system and one well suited to give us fundamental ideas as to the nature and functions of a nervous system.

The result of Baron von Uexhüll's experiments is highly interesting. He found, for instance, that each spine and pincer will act exactly in its normal manner if it be entirely removed from the animal, leaving attached, of course, the piece of skin with the included nervous system at the base. In general a spine gives two reactions—when a stimulus is very weak, it approaches the point of stimulation; when the stimulus reaches a certain degree of strength, the spine flees from it. These results are brought about by the contraction of muscles which attach the spine to its boss. The pincers behave in the same way as the spines, but, in

addition there is in each an independent nerve centre at the base of the blades which, when stimulated gently, causes the blades to open, but when more strongly aroused brings about their quick and sudden closure. Now, if the skin of the urchin be strongly irritated at any point the animal will in the first instance close the spines over the point, but if the irritation is extreme, it will fly from the source of irritation. According to Romanes, who first investigated the physiology of the sea-urchin, the attempt to escape was not carried out if the deep seated nervous system had been removed, and it appeared to him that the central nervous system exercised an intelligent government over the whole body as we suppose the brain to govern the body of a man. But Uexhüll has shown that this is not the case; he has shown that normally all the muscles of a healthy sea-urchin have a certain amount of tone which causes them to remain so taut that the spines stand out stiffly from the animal. This condition of continued contraction is maintained by a constant stream of influence pouring into them from the nerve-cells at their bases, and this stored up energy in the nerve-cell is spoken of as nervous tone. The nerve-cells under the skin are in turn kept supplied by those of the deeper nervous system which may thus be regarded as the great store house of the tone. But the greater the tone in either a nerve-cell or a muscle the less susceptible it is to stimuli. When an urchin is at rest it is supported by some of its spines, the muscles of which are stretched by its weight. Stretching lowers the tone of these muscles and renders them more open to stimuli than their neighbours. Hence they more readily respond to the action of a strong skin stimulus than those of any of the other spines; they cause the spines to which they are attached to bend towards the cause of the disturbance and thus tend to roll the animal away from it on to the other spines, the muscles of which are stretched in turn, and so the escape movement is carried on. Uexhüll has also found that there is a chemical substance in the skin which is decomposed by light, and this product of decomposition irritates the skin nerves and causes the animal to retreat from a bright light. A somewhat analogous substance is produced by the retina of the human eye, and Uexhüll believes that the sensation of light in ourselves is due to decomposition of this substance and the stimulation of the optic nerve by its products. If so, this fundamental sensation owes its character to the chemical nature of the pigment which is decomposed, and the light itself is related to the sensation no more than is the match to the energy of the cannon which it sets off.

The reaction to strong light as to an uncomfortable irritant is the first stage in the evolution of vision; the next stage, the reaction to



shadow, is shown by one or two species of urchins which inhabit the Mediterranean and by all the species in the Red Sea. A shadow falling on the animal causes a sudden convergence of spines towards the spot on which the shadow lights exactly as does any other slight irritation. Speaking in human metaphors, we might say that the animal regarded a shadow as an indication of an approaching enemy, and that it erected its spines in order to ward off an attack. But Uexhüll has shown that the vigour of this reaction is proportional to the amount of previous exposure to light, and he has found that it is due to a very simple mechanism. The irritation due to light is not all used up in causing movements of the spines. A portion is stored up as potential energy in the deeper nerve-cells, and when the light stimulus is suddenly removed, this flows back to the surface and causes a secondary irritation of the spines and this is the reaction to shadow. Our own field of vision is made up of a mosaic of light and shade, and seeing things means observing alterations in the distribution of light and shade, so that those urchins which are irritated by shade really see, and yet what a simple mechanical basis the whole thing has!

Outside of ourselves, to put it in a word, there is no light—vibration of the ether perhaps, short transverse electric disturbance according to the theory we may adopt as to the physical cause of the sensation, but certainly not sight, and the same can be shown to be true of smell, taste, hearing and sensations of heat and cold. Hearing in its simplest form is the result of the vibration of stiff hair-like processes which, moving in unison with the vibrations in air or water, irritate the nerve-cells at the base, but whereas the vibrations are a discontinuous series, sound is a uniform sensation. Smell is due, in all probability, to the very similar irritation of somewhat more delicate hairs caused by the molecules of the emanations of various substances impinging on them. This is shown by the curious fact that all the lighter gases are absolutely odourless—oxygen, nitrogen and hydrogen, for instance, cannot be perceived by the nose, whilst chlorine, which is thirty-five times heavier than hydrogen has a penetrating smell. The vapour of prussic acid, one of the most deadly poisons known, is twenty-seven times heavier than hydrogen, and it seems to be just on the verge of the possibility of being smelt, for, to some people it has a penetrating odour, whilst to others, such as myself, it is absolutely odourless.

Huxley, in his admirable treatise on Physiology, contrasts smell and the other senses. "Smell," he says, "gives us no sense of its origin being outside us. If a man," he continues, "had no other sense than that of smell, and musk were the only odorous body, he could have no sense

of outness, no power of distinguishing between the outer world and himself. This contrast holds true in human physiology where smell is a degenerate sense not of any great use or importance to us, but in the lower animals, where it appears to be the dominant sense, it can be easily seen that by smell the position of the odorous body can be ascertained. I have often watched a soldier crab scenting prey—in the particular case a piece of dead fish. The soldier crab smells by means of its small antenna. This limb the animal continually twitches to and fro in the water, searching for smells. When the piece of dead fish is introduced into the tank the twitching is redoubled in violence. Soon the movement is confined to the vertical plane joining the fish and the crab, and then the latter, having found out where the prey is, makes a rush for it.

The fact seems to be that no sense at first gives the idea of an external world. All who have watched a baby commencing to “notice,” as it is called, must have observed that the attempt to grasp or reach what it sees is a late phenomenon. The idea of an external world comes gradually with the experience that by voluntary efforts we are able to modify our sensations.

An interesting question has been raised as to the place where the sensation takes on its peculiar quality. Is it in the cell which is first reached by the external disturbance, or is it in the nerve-cell? I think the greater probability is that it is in the latter. If the optic nerve be stimulated by a blow, the sensation of light will result, and sensations of heat and cold have been referred by a patient to a limb that is cut off. If this view should be thoroughly established, we shall reach the extraordinary result that the sensations which make up the substance of our experience are caused by changes in nerve-cells, which changes are brought about by the irritation of peripheral nerves, but that the qualities of the sensations are not due to the nature of the nerve-impulses which act on the nerve-cells but to the peculiar structure of these latter themselves. If we take out of the world as pictured by what Huxley calls vulgar common sense, light, sound, smell, warmth, cold and touch, what is left to us as really existing? Vibrations of something? But *or* what are these vibrations, and what, indeed, is a vibration itself? It cannot be defined except in terms including the sense of vision which, as we have seen, is inadmissible. Are we not driven to agree with the physiologist Bunge in his statement: “The fact that the same stimulus applied to different sense organs gives totally different results, as, for instance, when the sun’s rays are perceived as light by the eye and warmth by the skin, whilst totally different stimuli applied to the same

sense organ produced the same result proves to us that the nature of the external world is to us a book sealed with seven seals, and all that we can ever know are our own sensations."

The next doubt which is suggested by the study of biology is the validity of the reasoning faculty. It is universally admitted the seat of this faculty is to be found in the hemispheres of the brain, and, if in an animal allied to man these are injured, whilst life may be prolonged, all appearance of rationality, or what we must regard as its equivalent in animals, the power of being able to learn from experience, vanishes from the actions of the operated animal. If, for instance, a frog be deprived of its hemispheres, it remains sitting in one posture totally oblivious of what goes on around it. Nevertheless, if the board on which it sits be tilted, it will shift its position enough to keep its balance. If food be placed in the mouth, it will be swallowed; if the skin of the flank be stroked, it will croak. In fact, all its characteristic actions can be called forth by a suitable stimulus, but there is no spontaneity or source of internal stimuli—in a word, there is no tone. It is a most interesting research, therefore, to try to find out the origin of the organ of reason.

As we descend in the vertebrate series through ape, rabbit, reptile, amphibian and fish we find a continual diminution in size in the hemisphere but a proportionate increase in size of the part of the brain termed the olfactory lobe. This lobe is the place where the central terminations of the olfactory nerves are found, and it is presumably here where the stimuli received by the nose are combined to form the sensation of smell. Now, we have seen that smell is in man a degenerate sense, and hence it is not surprising that in us the olfactory lobe is but a small portion of the hemisphere, but in the fish it is larger than the hemisphere; in fact, the latter appears to be merely a portion of the olfactory lobe. Hence, the biologist concludes that the function of the hemisphere was primarily related to the sense of the smell. We have, therefore, to endeavour to account for the evolution of reason out of the sense of smell. Now, it is very curious that even in man there is a curious connection between smell and the higher powers of the mind. No other kind of sensation is so potent in stirring up the memory as smell. A familiar smell will powerfully evoke the emotions connected with past experience, will bring back the past with a peculiar pungent reality. This is accounted for by the fact that the terminations of the olfactory cells are close to those which are credited with being the seat of the higher powers of the mind. The nerves of the sight terminate in the mid-brain and, therefore, their messages have to be

transmitted through a series of nerve-cells before they reach the seat of reason. Still more disadvantageously situated are the central ends of the nerves of hearing, for these only reach the hind-brain and have, therefore to transverse the entire mid-brain before reaching the hemisphere.

The essence of reason is the control of the emotions, in a word, of the natural impulses, so that orderly purposeful action and not blind, impulsive reaction results. These natural impulses are in every way comparable to the reactions of the lower animals of which we have spoken above, and like them are brought about mechanically by stimuli. Thus, the winking of the eye at a sudden flash of light, the start at the sound of a sudden noise are both instances of these reactions. If now we consider the condition of the dog-fish resting on the bottom of a shallow bay, we must conclude that all kinds of stimuli are raining in on it all the time through eyes and the numerous nerve terminations in the skin. If we now inquire if there is any kind of stimulus the reaction to which should for the benefit of the animal take precedence over the reaction to all others, the answer is, "Yes! the sense of smell," for it is through this sense that the animal perceives the presence of its prey, in a word, gets its living. Here then we have the secret of the localization of the power of control at the base of the olfactory lobe. The original vertebrate hunted by scent. In time, of course, as vision and its organ, the eye, became perfected this sense became also of great importance and a strong band of fibres can be traced from the optic lobe to the base of the hemisphere. Birds have almost entirely lost the power of smell, and hunt by sight, hence in them the optic lobes are greatly enlarged, but even in them the seat of control remains in the hemisphere because it has been firmly established there by long usage.

Perhaps, however, objection may be taken to the statement that the essence of reason is merely the control of the emotions. Max Müller defined it as addition—the power of adding concepts. It certainly involves memory and the comparison of past with present experience, and in its exercise the existence of the ego or subject is most clearly affirmed. *Ich denke daher bin ich.* Hence we conclude, that, in its beginning it meant the power of animal to act with reference to past as well as present experience. The sense of smell obtains its control because it calls up memories of past enjoyment, and it is conceivable that the soul of the animal, if such there be, should find itself in the reaction to this imperious and vitally important sensation.

The peculiarity of memory, however, is that when it is powerfully excited, it renders us inattentive to other impressions unconnected with

those which have excited the memory. In a word, we become less responsive to the stimuli. Intentness on one object has proverbially the effect of rendering us oblivious of other things. Now, there is a strong presumption that in the nervous tone which we found in its most elementary manifestation in the sea-urchin we have the beginning of memory. Tone is potential energy stored up in the cells of the central nervous system which renders them less susceptible to stimuli in proportion to its intensity, just as does memory. But, of course, the ultimate source of the tone as well as of memory is past stimuli, for the condition of the sea-urchin's muscles at any given time is due to the resultant of past and present stimuli.

Is not then, we may ask, the prime function of every central nervous system simply this, to be a store-house of tone? This has been at any rate proved for the flat-worm, the only other animal besides *Paramecium* and the sea-urchin whose reactions have been thoroughly worked out. In this animal there is a thoroughly localized brain, separable from a pair of nerve cords which we may compare to our own spinal cord. Most of the reactions of the animal occur in the absence of the brain, but the tone of the muscles and the regular movements are lost, just as in the case of the operated frog. The biologist's difficulty in the case of reason, regarded as an infallible guide, is that he can trace the evolution of its organ the hemisphere back step by step to an elementary aggregation of nerve-cells at the base of the olfactory lobe, and he finds, further, those elements, namely, memory and control on which reason in ultimate analysis appears to depend, manifested in rudimentary form in the lowest nervous systems which are known to him. It is extremely difficult to avoid the conclusion that reason is, like the organs of sense, a rough-and-ready weapon which enables its possessor not to reach absolute truth, but to penetrate sufficiently far into the structure of the universe to enable him to survive.

So far the arguments which I have been putting forward must appear as special pleading in favour of pure materialism; in reality they are the *reductio ad absurdum* of materialism, and, of course, the patent contradiction implied in them throughout is clear to every philosophical thinker. For it is by the joint use of our sensations and our reason that we prosecute the study of biology, and if our sensations give us no real knowledge of their cause and if our reason is by no means infallible — then we are driven to conclude that the subject matter of biology has no existence and, therefore, the deductions we make from it are baseless, and we are exactly where we started. We have enmeshed ourselves in a vicious circle similar to that of the old conundrum of logic—

Epictetes, the Cretan, asserts that all Cretans are liars, but Epictetes being a Cretan, lied, therefore the Cretans are not liars, and so on. The biologist starts out with the crude assumption that his sensations give him an accurate representation of the world as it is. Examining animals which are a part of that world, he finds organs which he believes to be the seat of sensations similar to his own, and he finds that those organs are so constructed that the sensations to which they give rise must be utterly different from their exciting causes and can give no true picture of the world of their possessors. Since he regards himself as essentially similar to the animal this leads him to doubt the very assumption from which he started, and so gradually he is bound to fall back on the idealist position. The biologist finds, in fact, that he has committed the common error of neglecting to carefully criticize the data on which he is going to found his science. To save time he takes these data ready made from physics and chemistry and somewhat uncritically adopts them. When the contradiction in which he has landed himself forces him to retrace his steps, he finds that he is driven to the conclusion that our own *ego* is the only thing about whose existence, we can be certain, for this is affirmed in all experience; in fact, experience, except as involving a thinking subject, is meaningless. Besides the *ego*, however, in all experience there is implied a ground or *noumenon*, the reality behind phenomena. This is affirmed because the course of experience is so frequently at variance with our desire for self-realization, and, therefore, there must be another element besides the activity of the *ego*. Now, all science is an attempt to formulate a theory of what this element is, and all science is fundamentally one, that is to say, no explanation can be regarded as satisfactory which is inconsistent with any of the phenomena; in other words, although the shortness of life and the limited powers of the human mind preclude the possibility of any one man studying all the phenomena of experience, the physicist must remember that the phenomena of his science exist in a world where there are also biological phenomena, and that no physical theory incompatible with biology can be true; and similarly the biologist must remember that his phenomena are part of a world in which there are certainly thinking beings, and whilst it is not his province to formulate a theory of thought, nevertheless, no theory of biology can be satisfactory which is incompatible with the existence of mind.

Every one of the so-called natural sciences is also, viewed from another aspect, an attempt to give an account of phenomena in terms of two simple ideas or *categories*, namely, *substance* and *motion*. Biology at-

tempts to reduce the phenomena of life to the activities manifested by a series of substances called protoplasm, and these activities are in the last resort the motions of protoplasm as a whole or of its constituent particles.

Now, if we inquire where these ideas of substance and motion come from the answer must be that they were generalized from commonplace experience. The experience that by our muscular efforts we can change the aspect of our surroundings as when we turn a street-corner, gives us the idea of motion, and the experience that there is often a malign foreign influence which resists our action, as when we come to a closed door or collide with a table, gives us the idea of substance. These ideas or concepts seem plain and easy to us simply because we use them so often in our everyday non-scientific but highly necessary attempt to adjust ourselves to circumstances. As has, however, been pointed out again and again by philosophers, they are by no means self-explanatory, and the attempt to use them and to unravel the order of all experience is just like the groping search for a needle in a hay-stack—a grope in any given direction may prove successful or it may not; one cannot tell till one tries.

Far older and far more successful than the attempt to explain phenomena by means of substance and motion is the attempt to explain them by *personality*. The first discovery of children, whom one professor of physics called “those most successful of all philosophers,” is that a large part of their experience is to be accounted for by the existence of other personalities besides their own. This discovery, so far as we can tell, was the dominating one in the early history of the race. It is for this reason that in early mythology the universal indwelling of spirits in all natural objects is a constant feature. If man be justified in explaining the activities of the nearest natural objects, the members of his tribe, by the assumption of indwelling spirits, an assumption which everyone follows to-day, on what ground can he be condemned as irrational in applying the same method of explanation to other natural objects such as animals, rivers, winds and even the sea? Obviously it is an eminently sane and rational way of proceeding, and it is to be rejected only if it fails to give good results. The ground of its rejection is the absence of sympathetic response on the part of many natural objects, and so the word substance came into use to express, but by no means to explain, the essential character of these.

Many natural objects which seem to present in their manifestations a closer resemblance to human activities than others were separated off as *living*. Now, life and substance are both nothing but emasculated images of personality, but their essential nature has been lost sight of

since the introduction of writing. Man started his inquiries into his natural surroundings by assuming that the inner life of everything was like unto his own, and when he found this an untenable idea in the case of many things, he invented names for the inner nature of such objects, but the names are mere *nomina nuda*, they explain nothing, for the only nature which he really knows is his own.

It is a most remarkable circumstance and one to which far too little attention has been paid, that whereas in the mind of a person ignorant of writing, the utterance of a sound calls up the thing or action it signifies, in the minds of moderns in the vast majority of cases it calls up only the collocation of letters by which it is indicated. To any one who reflects at all it seems little less than ludicrous with what infinite satisfaction some scientists base their edifice on atoms and molecules, concepts which, so far from being explanatory, appear to many to involve more problems than they can possibly explain. The fact is that in the minds of such scientists the idea called up by the word atom consists of the letters A.T.O.M.—nothing more or less. It would be unjust however to credit natural scientists with a monopoly of this form of error, for those philosophers who affirm that in the assertion that two and two make four we have an example of an eternal truth, seem to me to be in the grip of a precisely similar error. They forget what the words *two* and *four* mean; when these are enunciated the letters by which they are indicated flash across the mental vision; if the meaning were remembered, the eternal truth would be seen to consist of a proposition the two sides of which are identical. I venture to assert that all eternal truths which we can affirm to be such independently of the judgment of the individual, will turn out in the end to be identities of this sort.

If then all that we can be sure of is that we ourselves exist, and that there must be something not ourselves behind experience, what is the position that a thoughtful biologist must take up as to the nature of the Universe? I think it must be admitted that it is Pragmatism, which seems to me to be merely a new-fangled term for Huxleyan-Agnosticism. In a word, we do not know but we cannot forbear guessing, and we must judge of the value of our guesses by their success, in rationalizing or rendering simple the phenomena of our life. But what is rationalizing or rendering simple? Is it not looking at the facts from a point of view which is harmonious to the human mind? The necessary assumptions to this end must be boldly made and believed in, but let us never forget that the oldest and most successful of these assumptions is that behind certain phenomena lie other human spirits, and further, let us never let the reality of what we really do know, namely, our



own existence, be shaken by our theories of what we do not know, namely, what is behind experience.

When we pass beyond man in order to explain animals, the assumption of the existence of a personality like our own at once breaks down, for the only kind of spirit or consciousness of which we can form any conception is our own, that of thinking rational beings, and thought is inconceivable without language. Nevertheless, the actions of the higher animals, such as the dog and the horse, so greatly resemble the actions of men under stress of strong fundamental emotions that we are forced to believe in the indwelling in them of something distantly resembling human consciousness, though if we try to think out its nature we are completely baffled. As we descend in the scale the resemblance to human action becomes less and less. More and more we are able to resolve the activities of the objects of our study into definite reactions in response to definite stimuli similar to reactions in ourselves, which we know to be independent of the will and often unconscious and which can be carried out by the higher animals (and presumably could be in man) after the part of the brain which seems to be the seat of consciousness in man has been removed. Still the general tone of the central nervous system seems to be the first rudiment of that which in us accompanies the exercise of reason and will. Is there a spirit in the sea-urchin? To this question the only answer is that we do not know, and if there be one we cannot conceive what it is like. Uexhüll, who is in many respects the best of our comparative physiologists, frankly adopts an agnostic attitude on this point: "I do not say that animals have no souls; I say that if they have souls, we can know nothing about them." When this is recognized, it is certainly legitimate to apply lower concepts such as substance to explain as much as we can of living things, even if to substance we can in the last resort attach no more significance than that of the greatest common measure of all objects living and non-living. It is true that, as our most philosophical biologist Hans Driesch has pointed out, the categories of substance and motion will not fully explain even chemical phenomena. They were, as has been pointed out, suggested by the simplest everyday experiences—by what are called physical phenomena—and in order to adapt them to explain even chemical facts a totally new idea, that of chemical affinity, must be introduced, and it is therefore in the highest degree likely that the still more complex phenomena exhibited by living beings will require the still further introduction of other concepts. Still, we shall most quickly find out the inadequacy of the ideas of substance and emotion by using them rigorously to explain all they can. This then is the attitude in which I myself pursue the study of Biology,

in the full consciousness that all our reasoning is at most relatively true, and does not go to the root of the matter, hoping that in some future state of existence we shall rise to the consummation imagined by Hegel, when the Absolute Idea or glorified Human Spirit sees in all nature nothing alien to itself.

E. W. MACBRIDE.

## ON THE VERGE.

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*Κύκλου δ' ἔξέπταν πολυπενθέος ἀργαλέοιο  
ἡμεροῦ δ' ἐπέβαν στεφάνου ποσὶ καρπαλίμοισι.*

Vain hopes and passionate regrets  
For joys that must not be,  
A sundered self that pines and frets,  
The farce of Me-and-Thee,

And fleshly lusts, a torturing fire,  
At last I leave behind:  
The perfect heart of my desire  
Is what I go to find.

No further on the dusty road  
I drag my burning chain;  
From the galled shoulders slips the load  
Of penitence and pain.

The blinding day of strife and care  
Has sunk at last to sleep,  
And with the night a quickening air  
Blows off the boundless deep.

The wind is fresh, the stars burn clear,  
And I, like them, am free:  
O what have I to do with fear?  
Up, sailor, out to sea!

A. E. T.

## PHILOSOPHY AND EDUCATION.

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Philosophy it has been well said is an unusually obstinate effort to think clearly, and it will be admitted that in the subject of education there is wide-spread evidence of need for such obstinacy of thought. As Richter observes in his *Levana*, "That the age writes so much on education, shows at once its absence, and the feeling of its importance. Only lost things are cried aloud in the streets." In spite of the magnificent monuments to education that are all around us, the rapid and luxuriant growth of doctrines, systems and institutions, one common admission seems to be betrayed—that we are still seeking the art of education, or at least that there is no consensus in this matter. Certainly the importance of the question was never more fully recognized than it is at the present time. From the study proceed philosophies, sciences, histories of education; in the world of practice we find application to education of the results of every kind of knowledge that can possibly be conjectured to have a bearing upon the subject, every progressive nation in search of a better system, each country looking to others for light. Upon education almost every hope of modern civilization is based in turn. Education is to break down the barriers between nations, or to enable any one nation the better to overcome and ruin its rivals, whether by military or industrial warfare. It is to bring universal peace or to lead to the dominion of a single race, to bring to the individual or the people worldly success, or to form a character superior to the "slings and arrows of outrageous fortune," to tame the wilder races, or to foster in some oppressed people the discontent which will lead to revolution and reform.

If general principles or ends are conflicting, yet more of conflict is there in regard to the *media axiomata*, and in matters of detail—with reference, for instance, to the relation of state education to individual organization, to the relation, in systems, between knowledge and discipline, the question of the order and relative importance of subjects, and so on. "How," asks Mr. Sadler, in his *Special Report* (upon Education in Germany),<sup>1</sup> "are we ever likely to be unanimous about education,

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<sup>1</sup> Board of Education. *Special Reports upon Educational Subjects*. Volume 9. *Education in Germany*. London, 1902.

seeing that we are divided at heart, as well as in mind, in our ideals of what is most desirable in individual character, in social organization, in national endeavour? . . . Our school system in its lack both of formal and of inner unity is one expression of the lack of real intellectual unity in our national life."

In this confusion what kind of guidance can be expected from philosophy? "Philosophy," said Herbart, "must set the end of education," but will the world entrust this task to philosophers, or accept their direction in this more willingly than in other departments of practice? Philosophy has claimed to show the relation of all departments of human life to each other, and it might be expected that hence would proceed, first, the statement of the ideal human life, based on a consideration of human nature, of history, and a forecast of human destinies. Secondly, we might ask that philosophy would show what part amongst all the agencies to which the human being is subject can be played by educational system. And, finally, to narrower disciplines, to the sciences, for instance, of biology and psychology, philosophy would hand over the more detailed determination of methods. Such a plan, however, is, as it were, snatched out of the hands of the philosophic educator by the modern state. Before, it will be said, we can consider the preparation for an ideal life, we must educate our citizens for the work of mere life and form a people which will maintain itself in the fierce contest for national existence. Philosophy will be tolerated if it can help in these aims. Moreover, a more general objection may be raised against the treatment of educational questions from a philosophical standpoint. Can philosophy, it is asked, directly influence practice? May it not be in education as in other departments of practice that the influence must be indirect? Philosophic ideals, expressions of the philosophic attitude in educational questions, may supply some illumination to practical reformers; the study of general philosophy may have some effect upon the educator through widening his horizon and breaking down prejudice. But is it possible that a philosophic system shall take into account all the needs which the practical educator has in view? Is it not the function of philosophy to appear at the end of a movement, interpreting and pointing to underlying principles, rather than at the beginning to direct?

This age will not admit the philosopher into the School of Education without asking on what mission he comes. The reply is that he comes to apply thought in all its intensity to the educational problem. Philosophy, as practical method, is the thinking out to their very foundation

of the questions to which it is applied. As a result of such thought, systems may arise which will probably bear some relation to that rational form under which the thinker has conceived the universe, for no question can stand for philosophy isolated. Let the education of the London street Arab, the New York tenement child, or the country lad in Quebec, be the subject-matter of thought, and the boy's fate will be found to matter to the universe. The question what is to be done with him may involve reflection on all history, all the sciences of life, on national hope, and human progress. He is seen *sub quadam specie aeternitatis*.

An examination of the question what philosophy has contributed to the solution of educational problems must begin at the fountain-head, or with those theories and utterances which have proceeded from pure philosophy. Almost from the beginning of European thought philosophy has shown great attention to this matter, and placed, with inextinguishable faith, the hope of attaining the far-off goal, τὸ ἀγαθόν, the *Summum Bonum*, in some reconstruction and redirection of the upbringing of youth. For, as Kant insists, "The tremendous reach of education will only be seen when some being of superior nature has charge of our education." It is impossible, however, within the limits of this article to do more than illustrate the treatment of education by philosophy from a few leading examples. In this department, as in other provinces of thought, Plato's reflection upon the problems of Athens raises several of the chief questions that have been at issue at some period in the history of education. The educational system of the *Republic* is the system of a transcendental philosophy applied with the grand simplicity of the Greek thinkers to human affairs, and applied with the object of practical reform. The dangers that threatened the state of Athens upon the breaking up of the traditional ideas of authority, religious and political, and the rapid growth of a restless democratic spirit, sceptical, pleasure-loving, and individualistic, were to be met, not by a restoration of the old uncritical attitude, which was impossible, but by a total change of spirit, to be brought about by education. The chief characteristics of the new spirit would be a perfect sense of harmony and unity, resulting from a relation between individuals, and between classes in the state, organic in type, the whole being as a living organism of which every part has some dependence on every other, whilst there is direct control of all energies by reason, expressed in the famous dictum, "Philosophers shall be Kings." Into the political significance of this position it is not the place here to inquire. The *Republic* is probably to be taken as a philosophic allegory—"Truth embodied in a tale"—and it is necessary to

suppose neither that Plato anticipated its realisation nor that he regarded it merely as a pattern laid up in heaven. As a Utopia, it may be considered to be a regulative ideal, a source of inspiration to statesmen, as was the contemplation of the Ideas to Plato's Guardians. As an educational treatise it embodies certain main principles, which may be looked at apart from their setting. Firstly, a great faith in education. A perfect control of this instrument will make all things possible, even a change in fundamental human characteristics. Plato is the first to express the belief that the state may be regenerated through education. Further, his metaphysical position brings him to the view that knowledge being one, and the principle or Idea of Good one with the principles of Knowledge and of Reality, it is the highest kind of education, or the philosophic, namely, the education which makes possible the vision of the ideas, or power to exercise reason on the principles of thought and being which will make the best statesmen (that is, if he has been so trained as never to forget that he is the servant of the state, to which he owes everything). Perhaps we shall not be obscuring Plato's meaning if in more usual phraseology we say that from the point of view of the *Republic* it is the most liberal knowledge which will produce the best practical results, citizens best able to serve and most devoted to the service of their country. As regards the principles of educational method laid down in the *Republic* and other Dialogues, they mainly result from Plato's metaphysical basis. Such is the truth which has been admitted since by all great educational teachers (though discovered empirically rather than on *a priori* grounds, as by Plato) that education is a drawing out, not a putting in, or as described in the Allegory of the Cave-Dwellers, a turning of the eye towards the light; and that the mind can only be rendered capable of comprehending first principles by a very severe preliminary discipline, gained through the mathematical sciences. But Plato is perhaps still better known to educationists as the precursor of all those who insist on the importance of the early education of the emotions, especially through the first education of the Republic by means of Music and Gymnastics. Seldom has the potency of early influences on the senses and feelings and, therefore, the character, been better expressed than in the *Republic*.

Not less than Plato did Aristotle affirm that "it is the business of the legislator to consider how his citizens may be good men, what education is necessary for that purpose, and what is the final object of a good life," although less from the standpoint of general philosophy than of politics and ethics.

It is interesting to compare the Platonic educational teaching with

that of another metaphysician, nearer to our own day, whose conviction of the power of education to regenerate his people was equally strong and whose philosophic theory also deeply affected the form of his educational doctrine. Of the great German transcendentalists, Kant and also Hegel left contributions to the Philosophy of Education. It is, perhaps, however, in the addresses of Fichte delivered in Berlin during the time of the French occupation (December, 1807—March, 1808), the *Reden an die Deutsche Nation*, that we find the philosophic hope in education most intensely expressed. The spirit in which he spoke may be conjectured from the fact that he had craved (vainly) permission to accompany the army as lay-preacher. The addresses breathe the spirit of a philosophy of history and of Fichte's metaphysics, applied at a moment of national crisis and with a view to the salvation of the people. At the same time (as Kuno Fischer points out) Fichte takes the German nation as typical of the world, and the educational scheme sketched for Germany would be thus good universally. The underlying philosophy of history is shown in the view that the nation had reached the third great epoch in the history of humanity, the period at which reason was about to free itself from instinct and authority. The individualism, however, connected with the conscious recognition of reason had been shattered, in Germany at least, by an external blow. Salvation henceforth could only come from within, through the formation of a wholly new self, and this again through education. The present education is not lacking, in Fichte's view, in religious and moral teaching, but it fails to overcome the impulse of self-seeking natural to youth. It does not, therefore, go to the root. It is thus an education of the will which Fichte calls for, and this prominence given to the will both marks off the modern from the ancient ethics of education and belongs to Fichte's metaphysical position, taking as it does a form characteristic of modern transcendental philosophy. The new education consists in utterly destroying the will and subordinating it to necessity. That is, for Fichte, individual free-will cannot have a place, since only phenomenal existence belongs to the individual. The highest freedom for man consists in resignation of his own individual freedom, through which sacrifice he participates in the divine being. *Notwendigkeit* also is not a real necessity, but a moral and ideal necessity. Fichte formulates his view in the words that "education must possess the art of bringing all men to the insight that man stands under the divine will." As regards method, the main stages are;—First, an appeal to the natural impulse to, and delight in, self-activity, by means of which a good will (*Wohlgefallen*) for the conception of the good is aroused. Second-



ly, in order that the youth may be possessed by a longing for the social organization of man in accordance with reason, so that it will be impossible for him not to will this order, there must be a kind of community life, a *cosmos* in little, in which the youth learns to live for others, each able to feel that he can do something for the whole. Here the scheme seems to lack most, on account of the neglect of the powerful influences of family life. The large philosophic aim of Fichte's scheme of education is expressed in passages such as the following: "The destiny of the German nation is to found an Empire of Mind and Reason, to destroy the dominion of rude physical force as the ruler of the world. . . . Mind alone, free from all admixture of sense, shall assume the guidance of human affairs." Thus Fichte, like Plato, passes from reflection on the needs of one people in one age to questions of all time and all existence. As an extreme contrast to those philosophical systems of education of which the avowed purpose is the reformation or safety of the state, may be taken the earlier work of J. J. Rousseau, sometimes regarded as the founder of the modern philosophy of education, the hero of which is the individual regarded as independent of society, the human unit, whose highest interests are not aided by social relations, whose capacities are best developed in freedom from social conditions. Rousseau's *Emile* is of peculiar interest, both on account of its philosophic bearing in relation to the author's Social Contract doctrine and the metaphysics of human nature therein involved, and because it is the fountain-head of a series of educational experiments and theories which all indeed diverge more or less from their source, but which were deeply affected by it. Like the *Republic*, from which in almost every other respect it differs, it is probably to be taken as an ideal which Rousseau did not expect to see fully realized. "I show the end,—I do not say that one can arrive there—but I say that he who approaches nearest will have best succeeded." The metaphysical conception that the individual does not owe anything essential to his development to the society in which he grows up, the ethical view that the influence of society is corrupting in its tendency, and that the weight of convention, habit, tradition, is hostile to the true, natural growth of the character, are partly expressed in Rousseau's *Contrat Social*. "Rousseau's theory," says Leslie Stephen, "implies the sweeping away of the whole elaborate growth of beliefs, superstitions and sentiments, and the institutions in which they have been embodied, which have been developed during the course of man's life upon earth, unless they can be justified by abstract reasoning." The faith in abstract reasoning is no less characteristic of the French intellect than it was of the

Greek, but how different the pronouncements of the oracle in the two cases! The results are even more striking in Rousseau's educational than in his social teaching. *Emile* gives a picture of ideal education, based on the philosophy of individualism; it is the philosophic justification of those practical systems which assume that the individual belongs to himself first, to society afterwards.<sup>1</sup> To the position of Plato's Socrates, that the individual owing his education to the community, owes to the community the powers developed by that education, Rousseau would answer that *Emile* is self-educated, his nature having been allowed to grow, unhampered by interferences of society. The defect of this philosophy—the neglect to recognize that “The State is man's Nature”—has often been pointed out. In this system education is natural and negative. Give nature, the child's spontaneity, free vent; the educator need merely look on.

The German educational Reformers inspired by Rousseau follow the spirit of his method, though not necessarily adopting his philosophic basis nor carrying out in detail his rejection of social influence. Of these the chief are Pestalozzi and Froebel.

The main lines of demarcation between the methods of reflection upon education followed by the great philosophers of the past, and of which a few illustrations have been given, have seemed to be, firstly, ethical, or between the view of man as educated for the community and as educated for himself; secondly, metaphysical, the one school connecting the principles of education with a transcendental theory of the relation of mind to reality (Plato), or individual will to the divine will (Fichte), the opposite school basing the principles upon an empirical theory of the development of thought and sensation in the individual. It may be admitted that the modern student of education, or practical educator, does not go to a Plato, a Fichte, or even a Rousseau, to learn the ends for which he is to work. Is there any other type of philosophy better suited to the educational needs of the present? Modern attempts to treat education philosophically most frequently proceed by giving it a place in the universal process of things, regarded as Evolution. From this point of view Evolution, being in Herbert Spencer's words, “Change from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity, through continuous differentiations and integrations,” the History of Education is “a record of such evolution, and begins at the point when man takes himself into his own hands, so to speak, and seeks to guide his

<sup>1</sup> “Avant la vocation des parents, la nature l'appelle à la vie humaine. Vivre est le métier que je lui veux apprendre. En sortant de mes mains, il ne sera ni magistrat, ni soldat. Il sera premièrement homme.”

life towards an ever more definite, coherent heterogeneity, which is what we mean by an ideal end."<sup>1</sup> In the recent work of Dr. Horne, education is defined as "the superior adjustment of a conscious human being to his environment."

Education as "conscious evolution." This is an educational philosophy distinctive of our own day, but as regards practical application it hardly seems to be inherently as effective as the other typical theories. For, in the first place, a definite, coherent heterogeneity is too vague an ideal end to satisfy the practical educator; in the second place, the characteristic fallacy of stating as an ideal that which is supposed to be the actual course of development (namely, towards more definite coherent heterogeneity) is committed here as elsewhere in this kind of philosophy. And lastly, it must be questioned whether this kind of conscious evolution proceeds upon the same law as that of natural evolution. True education does, indeed, lead to further differentiation in mental capacity, but, on the other hand, it tends to the breaking down of many barriers which natural evolution seems to raise. For, since the most essential part of education is education of that element in humanity which is universal, it brings together, in spite of all varieties of physical organization, emotional interests and racial faiths, the thoughts of all beings who are animated by mind, and so forwards the cause of universalism. Indeed, one test whether any system of education be intrinsically true in its ends, would be this, whether it is a reconciling or an antagonising instrument—as regards the relations between men and between nations. For to quote the ancient phrase of Heraclitus, "Wisdom is the Common." This evolutionary philosophy of education is sufficiently indeterminate to serve as a framework for schools that may widely diverge.

A more definite and distinctive phase of the modern philosophy of education, a stricter attempt to make use of biological categories, has developed within this. This is the attempt of some thinkers to base the most practical and utilitarian view of educational system upon that Theory of Knowledge known as the Biological View of Thought, the functional view of Psychology. "If I could venture," said Professor Dewey (in an address before the Harvard Teachers' Association, March, 1901) "into what might appear to you the metaphysical field, I think I could also show that the current idea of culture belongs to the pre-biological period. It is a survival of the time when mind was conceived as an independent entity, living in an elegant isolation from its surroundings." Modern Biological Psychology endeavours to show that

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<sup>1</sup> Thomas Davidson, *History of Education*, chapter 1.

the cognitive activity as function of the living being must be brought into a line with all other vital functions. Thus there is no longer a

“Woundless and invisible thought that goes  
Free throughout time as north or south wind blows,  
Far throughout space as east or west sea flows,  
And all dark things before it are made bright.”

Thought is a process of life activity developed in subservience to the needs of life. Upon this basis old conceptions of education are challenged. Since it is on this view impossible for thinking to be truly directed towards ideal ends, there is all the more justification for the doctrine of education as the last and most complex process required to enable man to survive in the struggle for existence. It might, perhaps, be objected in the case of education as of other human interests, that a long history of the triumph of ideal ends causes doubt whether this philosophy goes to the root of the matter. The prevalence, however, of utilitarian theories of education is not the result of any metaphysical theory, but merely another aspect of one and the same spirit of the age. And this seems to be true in part of the relation between philosophical theory and educational spirit also in other eras. If, then, it seems that the hope of an ideal and realisable educational system rooted in a metaphysical theory must be resigned, another great question emerges, namely, whether philosophy could arrive at a theory of one best system, by examination and criticism of every important system that has actually been tried in the course of history. At least it seems that critical philosophy is bound to examine those educational systems which, realised by different ages and nations, have been founded, as it happens, scarcely at all on the reasoned out systems of philosophers, but have resulted from all the complicated factors which can be massed together as the spirit of the age, but only if we remember that, as regards its institutions, every age, even our own, expresses to a great extent the spirit and tendency of the past. In such a survey, a definite clue may be found in the line of development from the stage in which education is least free, appearing primarily as a growth, inevitable, out of the people's needs and tyrannous conceptions and customs, up to that in which it is least controlled by tradition, wont and use, and seems most sensitive to the conscious reflection, character and mind of the people, but also to its moods, caprices and emotions.

The insistent question of philosophy must again confront us at the close of such a survey. Can the rule of reason be ever expected to be complete in this sphere, as victorious not only over the forces of custom

and tradition but over those alien forces of party feeling and caprice which seem to grow more influential in the democracy? The close analogy with political developments is evident. In political societies also, the evolution may be observed from the group constituted by bonds of necessity, beginning with kinship and strength in war strong from tradition and custom, up to the group voluntarily formed by free association, and yet largely also by influence of irrational forces, even in the state and age of greatest liberty. "The main course of the educational movement," writes Mr. Sadler, "has always been in one general direction, namely, towards the liberation of the individual from various forms of external control. But the actual advance of the movement has been constantly deflected, now to this side, now to that, as the result of the incessant struggle of two conflicting forces."<sup>1</sup> The two antagonistic forces are the conservative, which in its extreme form regards education as a means of maintaining the mental and moral habits, the traditionary view of the world and of the ranks and classes of society which has prevailed, and the revolutionary, which at its intensest, places in education its hope of change, from the centre of thought and convictions outwards to the social organization which depends on these.

Another guiding-line in the survey of historical systems is suggested if, remembering that philosophy is pre-eminently interested in the End or Ideal, we consider how it would regard all the diverse ends set by the needs and aspirations of national life at different times for the control of education. Perhaps, they may be likened to Francis Bacon's "Idola," the forms, phantoms which dominate the minds of individuals and classes. Philosophical criticism may recognise that as the thoughts of individuals must inevitably be coloured, obscured, led astray from the way of truth by the "Idola" of authority, of public opinion, of private prejudice, and the thoughts of all by certain invincible, nay essentially human intellectual modes, so may it be that the forms of education always follow the dominating bias of the people or its rulers, and therefore fail to approach the ideal pattern. Such "Idola" or dominating conceptions would be seen in those eras and states that have not yet passed under the solving process of free ideas, working unconsciously and necessarily. In the later stages of freer reasoning they are consciously and intentionally applied. Thus, to take a few illustrations. In the earliest form of anything that can be called education we find "men divided into trades or guilds, each giving instruction in its own art," and especially those who supply the needs of life by labour, those who devote themselves to defence, those who are con-

<sup>1</sup> *Education in Germany*, op. cit.

cerned with the Unseen.”<sup>1</sup> Thus there are priests, soldiers, producers, as in ancient Egypt. Such a division of training is ruled by use, prescription, and we have a caste system. China is a good example of this stage, with her idea of education as the “initiation of a new generation into the beliefs of the past.” Glancing at systems in which free ideas begin to rule, we find certain “Idola” impressed on Greek and Roman systems, favourable on the whole to the main course of true education, and yet not entirely so. For they involve, especially in Athens, the exclusion of a large proportion of the people inhabiting the city from that exquisite culture which, as we realise in dismay, seemed to owe something of its perfection to the exclusion implied in slavery. Thus, together with the large Athenian view of the complete development of mind and body we find the refusal of such development to the majority of dwellers in the city. The phantom of thought here revealed is the aristocratic view of the incompatibility of a liberal culture and character with any form of physical, or even professional labour. The Roman system shows the forms determined by its history, and those ideals of imperial dominance which the Roman intellect, when it rose to self-consciousness, discovered to be implicit in all that onward movement inevitably pursued by the Roman character. The education was planned for the citizen and the soldier. Later, as the sway of words became of greater importance, there developed the education of the orator, of which we have a noble outline given in the *De Institutione Oratoria* of Quintilian, which perhaps may be called the first treatise of practical education. It may be noted that whereas the tendency of the Greek type is towards ideal of life for self, that of the Roman is towards the service of the community. According to Quintilian, early education is for the sake of virtue: “*Non dicendi modo eximiam in eo facultatem sed omnes animi virtutes exigimus.*”

Mediaeval education in Europe was dominated by the religious conception of the natural evil of human nature, and hence a large part of education was directed by the principle of suppressing and eradicating natural tendencies rather than developing natural faculties. The ideas of the Renaissance rose in force against the conception of human nature as essentially evil, but it re-appeared in some of the teaching of the Reformation, and the conflict of ideals which seems hardly ever absent from the theatre of education, once it has attained a certain measure of freedom from tradition, is to a great extent one between these two theories of human nature as evil and as good, from the 16th to the 18th centuries.

In our own day philosophical criticism may discern more clearly

<sup>1</sup> Thomas Davidson, *op. cit.*

perhaps than in previous ages, the influence of dominant conceptions of life upon educational forms, although beset by the difficulty of estimating the forces in the midst of which we live. For the susceptibility of systems and institutions to the influence of ideas as also to that of national hopes and emotions, which are not always truly progressive, is continually increasing. Democracy brings about a set of new problems with regard to education, if, indeed, it may not be said that the whole question becomes new. Phases of thought are perhaps reflected with a rapidity too great, each generation a surprise to the last, and possibly on that very account the "Idolon" of the people has too much control. There have to be noted, firstly, certain forms of thought which are almost universal in their power over civilized peoples, and, secondly, those special national types of thinking and acting in educational matters which have been of recent years even over-examined and analyzed.

Modern popular education, however regardless of philosophy, had at least its original basis in one great philosophical and moral idea, in the conception of the latter 18th and early 19th centuries, that all men are by nature free and equal, and should therefore have, in education at least—in other human things equality being more difficult to secure—equal opportunities. If this faith in equality has been in a certain measure wrested away by science, by deeper experience, by perhaps a less shallow philosophy, universal education is none the less part of the creed of the age, that is, not merely the training foreshadowed by the ancient castes and guilds which enables each to carry on some part of the work of the community, but education in ideas, fearless development of the mind of each individual, or, as Dr. Harris expresses it, "To give to each person in the social whole the net results of the experience of all his fellows, is the object of education."<sup>1</sup>

Of the many ideals which float before the mind of the age as momentous for education, that of national predominance as dependent on commercial and industrial ability is probably the most significant, in that its tendency is, in some measure, at variance with older ideas of a liberal education. This conception arising at a time of apparently powerful resurgence of national and racial feeling, is doing something to revolutionize educational system owing to present political conditions. We confront a situation novel in educational history. Never before had state or individual ruler so large an opportunity of enforcing by means of early education a form of belief, a mental organization and conception of life, upon the people. The sacrifice of home-training to public

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<sup>1</sup> *Psychological Basis of Education.*

or state education is in some countries on the road to completion. It is an article of faith assumed, that the minds of the children are rightly to be formed by the state. The vision of Plato is no longer in the clouds, the judgment of Aristotle is affirmed, and through the power of modern science and the completeness of modern organization, the state may have, already has in some countries, an iron grasp over the plastic nature of the child. Individualism may still be vocal in literature, in political oratory, but a more powerful agency is undermining it than was ever wielded by despot or *ancien régime*. Not that equal educational opportunity necessarily leads to uniformity. The education which brings uniformity is not that true education described by Richter as "The liberation of the ideal human being which lies concealed in every child,"<sup>1</sup> but it is use of the methods of education in the interests of the production of a definite type. Whether or not such a condition is approached in any modern state, the argument is that in so far as it is aimed at, in so far as the nature of the youth is set by means of an external control in the direction of particular interests and the capacity to pursue those interests predominantly developed, in so far the state is constructing such youths in the image of the national ideal. But to the Platonic result there seems to be lacking the *sine qua non* of the *Republic*, that Philosophers must be Kings. Such does seem to be, for instance, in some measure the intention of the existing *régime* in Germany. The Germans have set themselves with all the national thoroughness to the shaping of a people that shall win industrial supremacy. The things for which Germany once stood in the imagination of the civilized world, our "Germany of mystic philosophy" and music, have certainly not entirely left her, and in so far as she has changed this is by no means to be ascribed merely to education, which is but one form in which the spirit of the age is expressed. But it seems to be admitted by those who know, that modern Germany bears witness to the tremendous force which education may wield upon national character. The same kind of Governmental and national anxiety in various countries is illustrated by the spirit of recent commissions and other agencies sent out by different nations to see what may be learned from each other in the interests of national prosperity. The ruling idea is expressed in the introduction to the *Report of the Moseley Commission*: "If the British Empire is to hold its own, our old industrial methods will have to be dropped, and especially our present method of popular education will have to be changed. Enormous strides are being made

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<sup>1</sup> *Levana*



by the United States, with its truly wonderful natural resources to draw upon. On the other hand, Germany, which is also making giant strides has not such natural advantages, but has made her progress solely through the force of scientific knowledge and the education of her people."

Another side of this dominant conception of material supremacy is that form of the "Idolon" which appears as a peculiar type of national self-consciousness leading to what is known as the teaching of patriotism and stimulation of Imperial sentiment. This may be recognized by the philosophy of the history of education as the modern form of the civic sentiment which has taken many forms in different ages, and which not unnaturally in the present day endeavours to capture the schools. At times it may appear as an instrument necessary to the safeguarding of national life confronted with the tremendous problem of immigration. Neither this nor the application of education to the attainment of industrial and commercial success, is necessarily condemned by Philosophy. It is pointed out, however, that such ruling conceptions are not intrinsically relevant to true education; that there may, for instance, be intellectual possessions open to the individual, which are too precious to be justly sacrificed to the interests of a national faith, perhaps transitory and erring. And, again, that the hopes of the great pioneers of universal education were set rather on the breaking down of divisions between races and national prejudices than on the intensifying of the sense of difference and national egotism.

Philosophical criticism considers also whether, in spite of the sway of those educational ideas which seem to appeal generally to modern civilized peoples, there are marked ideals and forms of thought in each nation which deeply affect its educational system. That this is so is evident on a slight observation, but the analysis is more difficult than that of the more universal forms. Mr. M. E. Sadler, in the philosophic estimate of national educational character which he gives in his *Special Reports* upon foreign systems, maintains that the strength of German education lies rather in its great tradition of distinterested devotion to knowledge than in the machinery of State control, which is indeed a peril to the best German tradition; that the moral basis of American education is in "the recognition of the claims of each individual human being to the best available education"; that the "moral power which animates the schools is the determination to give every boy and girl a chance."—"But these claims," he adds, "are not satisfied by a merely technical training." Again (in the same Report): "It would

be nothing less than a catastrophe if any social or educational changes were to impair the great tradition of the French schools, the tradition of literary style." And it seems to be feared that such changes may be brought to pass gradually through the influence of the more general ideas affecting the group of nations to which France belongs. There is less danger, perhaps, that the characteristic English view of the training of character and physical powers will be lost since its value seems to be admitted at present by other nations. The English variety and individuality of educational forms is also almost impossible to suppress, since it results from irreconcilable divergences in the racial character.

When we revert to the question whether an eclectic system can be conceived which shall take the best of every historical and national system, take whatever conforms to reason, rejecting all the error which, through irrational growth, has become entangled with it, philosophy reminds us that here, as in the case of political forms, it is vain to adopt the institution unless we can at the same time infuse the idea. Each nation will probably best solve its own problem and attain success by following its own highest ideal, the breath of its spiritual life. Is this to admit that after all Wisdom is not the Common? No, but it must work through the forms and body which national character and history give. These, however, may be deepened and widened as far as possible by attention to the educational products of other nations, not in abstraction, but in close relation to the temperament, experiences and institutions of these nations.

The highest ideals, it appears, are not always those that have appealed to the age universally, but those that have appealed, each one more intensely, to some single people, and it seems, therefore, to be especially the mission of individual nations to uphold severally the brightest light which they have perceived, the one a faith almost religious in the moral value of education, another a devotion disinterested to the pursuit of truth, a third its passion for independence and force of character, a fourth its belief in sheer reason. In these, moreover, rather than in the common search for the conditions of material success, will each find the true source of any greatness it may attain and its worth in the history of humanity.

Up to this point there has been mainly under consideration the attitude which thought may be considered to take towards the question of ends in education, as seen either in the conscious efforts of pure philosophy, or in a philosophic criticism of those ends set by the ruling intellectual and social tendencies of the day. Another very important func-

tion of philosophy in this sphere is a criticism of methods. Such a function, indeed, may seem of more practical value, for where the thinker may be powerless to compel his generation to change the ideals in which all their interests are centred and so eradicate the conceptions that dominate educational tendencies, he surely may win attention when he points out that the success of methods depends on understanding the principles of human nature, that knowledge of the laws of mind and of life is of service when it is the growing life and the developing mind on which the teacher lays violent hands. It is impossible within the limits of this article to give any complete discussion of the philosophic treatment of methods, or do more than indicate certain main points of view. The question of method has become of recent years exceedingly scientific, and an immense literature has developed on the subject. Philosophic reflection enquires what this science is, and what is its relation to other human sciences, and the answer here suggested is, that in so far as Education is a science it is independent of all others, having its own special experience although it finds valuable auxiliaries in Biology, Psychology, Hygiene, etc. Moreover, it will be urged that all practical education is an art in the first place, and that the attitude proper to science is not the attitude proper to the teacher, *quâ* teacher. In explanation of these positions, it has first to be shown that the chief principles of educational method were arrived at without the aid of the other human sciences, which were indeed largely undeveloped at the times of first discovery.

One of the most striking impressions given by a study of the history of education is the great extent to which the principles, emphasized by modern psychological pedagogy, have been insisted upon by earlier reflection in this sphere, guided by the first and greatest category of the educator, namely interest in human youth, and the *sine quâ non* of discovery in any department, personal experience. It seems, indeed, as if there were certain main laws inevitably recognised by the reflection of a keen mind unless too far dominated by some powerful bias concerning the end. Thus the importance of early impressions was insisted upon by Plato, and again Aristotle, the study of the individuality or independent dispositions of pupils first recommended by Quintilian, who also holds that exercise of the mind is naturally pleasant to the young. Quintilian also attends to the natural development of the powers, remarking that the memory is most tenacious early, and suggests the introduction of the play motive (Let it be a game—asking, and praising the answers), and advocates friendship between teacher and pupil. The

advantage of education by action was obviously assumed in the Spartan and Roman systems. The Roman youth by action learned the duties of citizens in field and forum, in society of elders. The endeavour to make education natural and practical, and to adopt gentle and attractive measures is found in educational systems following on the Renaissance and Reformation. In the 16th century Ratke, and in the 17th Comenius, anticipated some of the views held most modern. "Follow nature", taught Comenius, "take full advantage of the natural desire for activity and growth, and all men might be able to learn all things." Historians of education consider that Locke, Rousseau, Pestalozzi, Froebel, felt his influence, and it is hardly necessary to insist that in these four all the most fruitful and practically valuable ideas of modern educational method are found developed or in germ. In Rousseau the following of nature and progress through the natural order, freedom, self-development; in Pestalozzi, especially the relation between thinking and doing; in Froebel, self-activity, applications of which are Manual Training and Kinder-garten, even the conception of education as conscious evolution; in all, the emphasis of the necessity of interest of the child in his work. Educational science as now interpreted was practically founded by the latter teachers, and their principles as well as those of earlier writers have been elaborated and fortified by studies of modern Psychology, Physiological, Genetic, and Child Psychology. Nevertheless, such study may be carried on in a spirit which, though proper to the study, must be laid aside when the teacher enters the class-room. For in the class-room his work is rightly, as it has been expressed, "artistic work." "The more," observes a writer in the *Educational Review*,<sup>1</sup> "the scientific spirit comes abroad in the field of education, the more clear becomes the demand that wherever possible the results of such research shall replace the naïve pronouncements of even the finest unscientific insight." It might, however, be shown that the insight thus called unscientific may be guided by the very spirit and method which are the proper science in this field, and which have given rise to all the great educational discoveries, namely, the spirit and method which result from deep sympathy with human nature directed by a wide experience and a humanistic knowledge of history and literature. Afterwards and together with this, in our own day, though in subservience to it, come the instruments founded by those natural sciences closely connected with the subject. It is impossible to have too much knowledge of the conditions of memory, of fatigue, of the relations between mental processes and

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<sup>1</sup> January, 1905.

nerve processes, of the evolution of the ideas of space and things through the experiences of the average infant, of the relation of motor tendencies to processes of development, and so on. Yet must philosophical criticism point out the present danger of assuming that a foundation of such knowledge is sufficient foundation for the creation of a good educator. Professor Münsterberg perhaps goes too far in the reaction against Pedagogical Psychology expressed in his essays on *Psychology and Life*, when he declares the psychological attitude to be not only other than, but incompatible with, that of the teacher, and child psychology to be utterly useless to the teacher as such. In the following positions, however, he seems to speak some truth: "Certainly the teacher ought to study children and men in general, but with the strictly anti-psychological view. He ought to acknowledge them as indissoluble units, as centres of free-will, the functions of which are not causally but teleologically connected by interests and ideals, not by psycho-physical laws. The study of the mental life of man from this point of view is not a special science; it belongs partly to history and literature, partly to logic and ethics and philosophy, partly to poetry and religion." A special note, perhaps, may be added upon the place of poetry in this list. It is surely no idle thought which connects the function of the teacher with that of the poet. The poet is in a supreme sense he who seizes the unique in life, who never ceases to realize that no human situation is exactly repeated, upon none to come can we accurately calculate. For the nature of the child is always individual; he sees it at each moment with fresh eyes and it can never become common and stale. But this is the very attitude which is desirable for the teacher, not the expectations of averages, not the calculation of exactly such effects to follow upon such and such causes which he has set in operation.

Surely no more striking instance could be found of disregard of Aristotle's cardinal maxim of scientific method—"It is not possible to demonstrate in one science upon the principles of another"—than what has been called The Quantitative Study of Education, in which attempt is made to give numerical expression to educational facts, to express in numbers the relation between mental development at one stage and at another, or the relative progress made by several students in one study. The theory of the "average child" seems to be another instance of misplaced scientific method, as, for instance, the view of one school, that the ages between eight and twelve are characterized by certain leading traits which we may expect to find in all children. It seems almost impossible to arrive at true ideas of averages in such a matter as the disposition of developing youth with all its infinite individuality. And assuming that

definite results can be obtained, is it possible for the practical educator to apply them to each case of the endlessly varying individuals from whose cases, summed up, the average may have been formed, but no one of whom conforms exactly to the average? If we examine further the conception that in the child mind typical stages of development must follow each other in a certain order, it seems to be not so much the result of a truly scientific and unbiassed observation, as of the preconception of what is known as the "Culture-Epoch" theory, or the doctrine that the evolution of the individual must psychically and morally follow that of the race. Granted that there may be some indefinite truth in this theory, the educator need not therefore accept the inference that he must encourage or tolerate in the course of individual development, the re-expression of every stage of the life through which the sub-human and human ancestry may have passed. The acceptance of such a view would seem to be tantamount to the giving up of his birthright by the teacher, and the reason for his existence. His function is based on the faith that, whilst all knowledge possible of biological and psychical development is theoretically necessary to his task, nevertheless he accepts such facts of natural development as material upon which to work, to modify, alter, it may be, transform. For he has received by an inheritance which is not that of natural evolution and which is not to be given by hereditary transmission, a great body of intellectual and moral products—the hardly won results of the labours of human reason. And by means of these it is his task to lead the child up to the stage of civilized life and to the difficult position of the member of complex society more rapidly than by a mere observation and following of the tendencies of nature he could perform the work.

Critical philosophy might go a little deeper into the causes of the inadequacy of the merely scientific point of view in education which, misapplied, leads to the fallacy of dealing with human beings in classes and groups and according to averages and types, to which indeed the restraints of practical conditions encourage. The practical fallacy corresponds to what is an ineradicable feature of human thought. Here appears what may be called, after Bacon, the Idol of the Tribe, the nature of human reason to see the general, to neglect the particular, to know through universals, and so gradually but never completely grasp the individual. With this instrument we must work in knowledge. Nevertheless in practice it may have to be dropped for the time so that in spite of uniformities in the science of life and mind, the seeker in Ethics, in Sociology, in Education, may stand amazed but not blind, confronting the unique, the uncalculated and incalculable, the wholly new.

“The ideal teacher,” says Herbart,<sup>1</sup> “does not compare his pupil with others, he compares him with himself; he compares that which the youth becomes with that which probably he might have been. He is content with none who lag behind their own possible ideal; he is discontented with none who become as great as could presumably be expected of them.”

When at the conclusion of such a brief reference to the ends and the methods of education as has been sketched, whether as set by purely philosophical systems or actually tried by human societies at different times (springing in this case from the needs and dimly realised ideals of the age), we ask what are the results of the obstinate efforts at clear thought in this sphere, what solution of immediately pressing problems can philosophy give, there is no trumpet-like answer, and it may still seem that philosophic reflection can do little more than analyze and characterize the obscure and complex influences upon which systems and methods depend. No doubt such reflection will be amongst the influences that modify educational currents, though indirectly. Indirect influence will proceed, for instance, from the philosophic revelation of the real ends of true education, which are discerned by all logical thought of those concerned in this portion of experience—that these ends are nothing less than bringing to actualization the highest possibilities in any human being. Such a thought guiding those who examine into any actual method or construct new educational systems will act as a regulative ideal if not immediately practicable.

In the matter of curricula for instance, let us take one of the burning issues of the moment, that of the place of classic studies. The philosophic view will evidently lead us to consider what concern these studies have with the true end of education, and again with the pursuit of its own highest intellectual ideal by any nation,—whether, for example, the arguments that the preservation of the great tradition of French style is bound up with the persistence of classical studies are convincing, and, if so, under what conditions these subjects may retain their place, whilst allowing space for the other knowledge necessary to national prosperity.

Indirect or even direct influence may also proceed from the philosophic criticism of method. This criticism, it has been argued, points out that whilst there are sciences with which it is especially important for the educator to be familiar, the science of education is directly derivable from none of these, having its own postulates and categories which are not adopted from theirs; further, that both the greatest educational discoveries are made and the highest art of the teacher exercised by

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<sup>1</sup> *Letters.*

those who do not approach this question in the strictly scientific spirit, though having science as an instrument at their command.

But in the field of method the philosophical treatment of education does also lead directly to the emphasis of at least two cardinal maxims, the carrying out of which brings us into the midst of the battle fields of our day. Firstly, from almost all the philosophies which deal with education as well as from all the great practical teachers, comes the insistence upon self-activity, the application of conditions which will lead the young to develop their own powers by exercise, the demand more or less realized, in fact, of a method which shall leave to the taught all the benefits of self-education, whilst ensuring that they reap all the advantages of mankind's experience, their birthright in their century.

The philosophy of Fichte, and the pedagogy of Froebel give characteristic forms to this principle. Some later pedagogical systems have perhaps been extravagant in their advocacy of self-development, whilst nevertheless there creeps insidiously into them the opposite danger of over-direction. Thus we may see the child's spontaneity in play destroyed by guidance of his games in the kinder-garten itself, the stronghold of this doctrine.

In fact one of the most incurable fallacies of the educator proceeds from a one-ideal application of that principle of education which requires that we bring the best results of all experience as far as possible to the youth who cannot experience all himself. And since present industrial conditions (the struggle for existence requiring the largest equipment possible within the shortest time) apparently intensify the need of this kind of education, we may perceive beneath the rivalry of systems the conflict of this tendency to over-teaching with the principle of self-activity. But from all the nations which have been devoting their attention increasingly to the educational problem during the last half century, are proceeding expressions of dread lest the systems established with so much earnest thought are not favourable to the development of will. At the Berlin conference on Secondary Education held in 1890, Dr. Virchow is reported to have said, "I regret that I cannot bear my testimony to our having made progress in forming the character of pupils in our schools. When I look back over the forty years during which I have been professor and examiner—a period during which I have been brought in contact not only with physicians and scientific investigators, but also with many other types of men—I cannot say that I have the impression that we have made material advances in training up men with strength of character. On the contrary, I fear that we are on a downward path.



The number of 'characters' becomes smaller. And this is connected with the shrinkage in private and individual work done during a lad's school life. For it is only by means of independent work that the pupil learns to hold his own against external difficulties, and to find in his own strength, in his own nature, in his own being, the means of resisting such difficulties, and of prevailing against them."<sup>1</sup>

"Two things are necessary in instruction," wrote M. Boutmy, "namely, that the pupil should get knowledge, and that he should learn how to think. The tendency of the organizers of secondary education has been to pay more attention to the first than to the second." And Prof. Buisson, one of the creators of the system of State Primary Education in France, writes, "Something is wanting in this country, but it is not a system, a dogma or a formula. What is needed is not knowledge, but moral will." In America, the same cry is not unheard: "Many teachers of my acquaintance are so insistent in their charges of deterioration in the product of the elementary schools, and the cry from outside the schools that the young men and women do not take responsibility as their parents and grandparents did at their age is so frequently repeated, that I am forced to believe that many people do see a deterioration in the great mass of school children so far as independent power is concerned."<sup>2</sup>

The same impression is not uncommon in England. Philosophy must surely continue to insist that all the educational triumphs of the present would be unavailing, and seeming progress here retrogression if these fears were well founded and realized, for philosophy looks to the future not only of the individual, but the remote future of the race and of humanity. And once having realized this danger, educational organizers will reconstruct and remedy, that is if they are mindful of the true and universal ends of education and unbiased by the Idols that confuse the judgment. As a matter of detail it would follow that room should be left for unhindered development of educational forms on individual initiative, distinct from state institutions, though there seems to be no essential reason why the latter should not also learn to foster independence.

The other cardinal maxim for practice which proceeds both from philosophic reflection and attention to the history of education, is that of the pre-eminent importance of the Teacher. "If education is to be im-

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<sup>1</sup> Quoted by Mr. M. Sadler, *op. cit.*

<sup>2</sup> Miss Katharine Shute, Harvard Teachers' Meeting, 1901. See *Educational Review*, May, 1901.

proved it must be by greater capacity of the Teacher,"<sup>1</sup> said Bishop Creighton. Here Philosophy may remind us that the history of all great movements brings out that it is the personality of the leader upon which almost everything depends. The reformer may think that it is the system to which the reform is due, but it is more truly the spirit of the chief mover. Moreover, this must follow upon philosophic principles. The human being constructs his world upon the basis of sensuous experience, common also to the lower animals. With humanity, however, comes the world of values, knowledge to the mind, beauty to the artistic perception, a world of ethical choice for the moral individual. To one individual this world is much richer, fuller of content, of momentous significance, than to others. Such a person will be the ideal teacher if in addition he is possessed by the longing to make this known, to reveal to the young the greatness and wealth of the world that may be theirs. Thus it is personality which is the greatest need, because this, the one piece of knowledge most universally desirable, can best come through the fire in the spirit of the teacher who has it and kindles a corresponding fire in the youth.

The application of this truth of the importance of the teacher to existing educational needs need hardly be developed, for it is obvious that too commonly the question of the teacher is subordinate, in the institution of systems and schemes, and that the conditions are too frequently lacking which are essential to giving this office all its value and efficacy. With a very different thought were the words from Daniel inscribed on Fichte's tombstone: "The Teachers shall shine as the stars in Heaven, and they that turn many to righteousness as the brightness of the firmament."

Lastly, the indirect and yet possibly not unavailing influence of philosophic reflection will proceed through analysis of those deep-seated and elusive conditions of intellectual phenomena which manifest themselves in many different forms and spheres. Confronted, for instance, with the question why the power of mental concentration appears to be growing rarer, why there seems to be a decay of certain kinds of imagination and less of original creativeness, philosophy will not charge these losses to the account of education, but show that education here suffers with other intellectual energies from a calamity to which the whole character of modern civilization contributes. As an expression of this condition might be suggested terms borrowed from Kant's famous account of the two functions necessary to experience or knowledge, the element

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<sup>1</sup> *Thoughts upon Education.*

of thought, the element of sensation. Percept without concept is blind; concept without percept is empty. For a great deal of modern experience may be described as containing too small a proportion of thought to the overwhelming abundance of the element of perception. Hence its blindness or short-sightedness, for the reality of those things is not seen which are seen merely as a phantasmagoria of impressions, nor their whole meaning grasped.

It may be prophesied that such a phase will pass as the nature of civilized humanity re-adjusts itself to changes in environment too rapid. In the interval it seems to be highly incompatible with original genius, which is always characterised by an unusual proportion of the element of thought compared with that of sensation in the experience resulting. The characteristics of the age are unfavorable to creative genius, though not to a high degree of intelligence, but it is not urged that education can do much to undo their effects except by admitting the factor of freedom and flexibility in systems, and suffering the self-activity of the educated to leave, as it were, room for the genius as well as liberalise educational institutions. "The Real Educator," says Richter, "is the living time, which for twenty or thirty years struggles unceasingly with men, through actions and opinions, tossing them to and fro, and as with a sea of waves, must soon wash away or cover the precipitate of the short school years."

HILDA D. OAKELEY.

## PRAISE OF FENCE.

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To write on fencing in a university magazine may at first sight appear to some a symptom of unseemly levity. To such we would say it is for them this thing is done. To those who know the foil only as an aid to healthy exercise and grace of movement, or a precaution against *em-bonpoint*, we may quote the words of a great exponent to a titled pupil, "You will find the Turkish bath cheaper and easier." That fencing is a fine art and a great sport the English-speaking world is slow to believe. But what does Cyrano de Bergerac say in the midst of the grand stream of his dying rhetoric? In recalling all the great men of the genius whose acquaintance had made his life worth living, he puts the fencers beside the poets, and this is no category of disparagement like that in which "the lunatic, the lover and the poet" are banded together. Call to mind, ye cynics, that all civilized language is steeped in the similes and metaphors of sword-play; also know that in the English language as used by even the best stylists these sword-born phrases are as a rule wrongly applied. *Wielding, countering, thrusting* and *passes* are only a few of the many words in common use of which the swordsman and the penman have totally different conceptions.

Your Englishman, too, delights in reading fights, and the novelist therefore serves up all manner of blood-stained imagery in connection with historical romance. If the history portrayed is no truer than the mode of fighting described, alas for the historical novel as an educational force! Have we not all read of mail-clad knights practising marvellous dexterities in spite of an eighty-pound costume and a ten-pound sword? But the other day, I read of one of Queen Maud's warriors in the fight at Oxford *disengaging in carte*, a movement not invented till four hundred years later, and not so named till quite the other day. But it is of sword-play I would write and not of the anachronisms of local-colour-mongers.

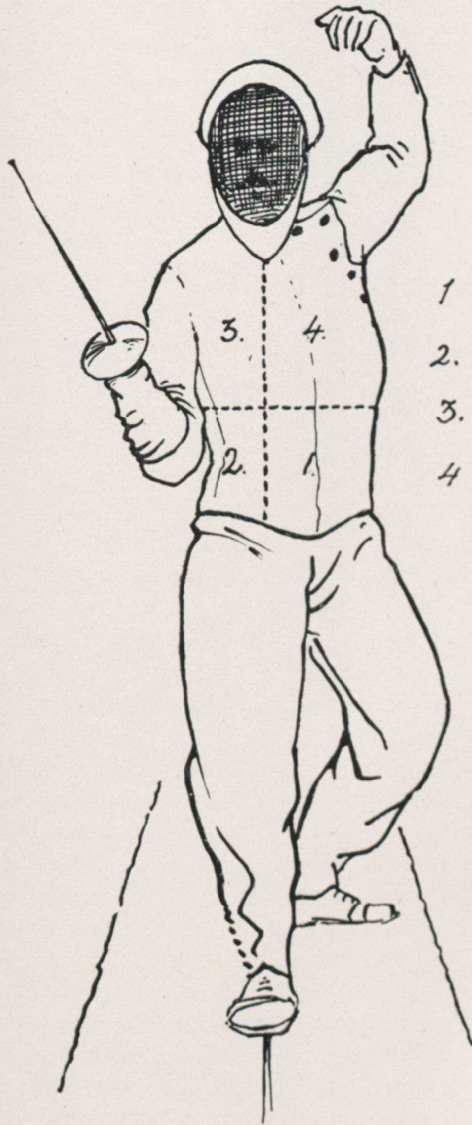
It is good to charge down the field with the ball passing from hand to hand among the backs while the scrimmage disentangles itself, or to wear down your man across the miles of stubble and plough in a cross-country race. It is better still to step into the ring to take what comes

when an extra round is ordered and the air tingles with the pent feelings of the onlookers, one's whole consciousness centred on the object jabbing and ducking in front, you and he the only cool, collected beings present, while pandemonium swells unheard around, to burst in suddenly upon both when time is called and the battle is lost or won. But best of the qualities which sport can yield is the last *phrase* of a bout at foils where a well matched pair uphold the honour of their schools of fence, as much by the frank acknowledgement of the lightest touch as by doing theoretical murder with the sword firmly arched against the opponent's breast. The intensity of consciousness experienced by the principals in a good duel, while they throw death about as tennis players do their balls, must at least be worth the risk, provided always a good enough *casus belli* can be found.

And what, a fencer may inquire, does the uninitiated eye behold? And he recalls for his answer the experience of his unregenerate days: A ceremonious salute, then two silent statues with their swords changing their relative positions imperceptibly, so quick are the moves, so soft the motions; then the dull *cluck* of firm-grasped steel on steel as the blades find each other; and now one has attacked like a thunderbolt and the *z-z-z-z* of grazing blades varies the *tic-tac* cluck of the shower of steel. The attacker has recovered on guard; the position is reversed, (if southern schools are represented, yells and barks will give emphasis to the feints and parries); then, lo! a foil arches stiffly, the figures are of marble again for the space of time a fly might travel a yard, and then with a shout the discomfited swordsman acknowledges defeat, points the place and salutes his adversary. The whole phrase lasted perhaps ten seconds, of which seven were spent in sparring. The rest was the fight which might on analysis, if a recording machine existed capable of taking the facts down, be something like this:—First half second: A attacks by *double and disengage* (three motions); B parries the final *disengage in carte* and returns straight (i.e. riposts); A parries the riposte without recovering and on B's retiring counter riposts with *one, two*, re-attacking (i.e. advancing from the lunge), etc., etc., etc., till finally one or other is *deceived*, that is, parries the wrong part of his target. Into the technicalities of deception it is impossible to enter without a sword in place of a pen as a vehicle of expression.

The *phrase* in fencing is the period from the falling on guard till one or other is touched; and the uninitiated spectator is often greatly puzzled by the verdict and the score, for there may be many invalid touches before a *palpable hit* is made.

The parts of the phrase we have imagined are each and all coherent,

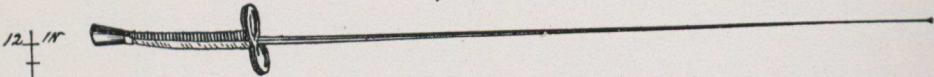


- 1 Prime and Septime
- 2. Seconde and Octave
- 3. Tierce and Sixte
- 4 Carte and Quint

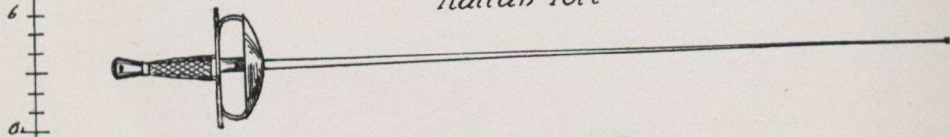
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DIAGRAM OF FENCER GIVING OPEN INVITE OF SIXTE SHOWING DIVISIONS OF TARGET CORRESPONDING TO LINES OF ATTACK & DEFENCE

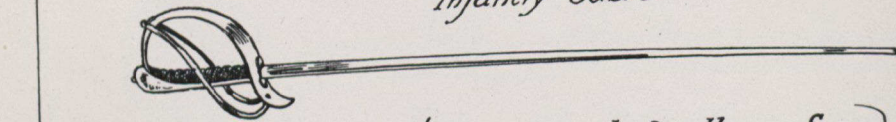
*French Foil*



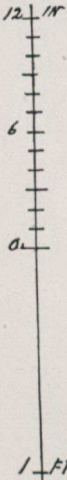
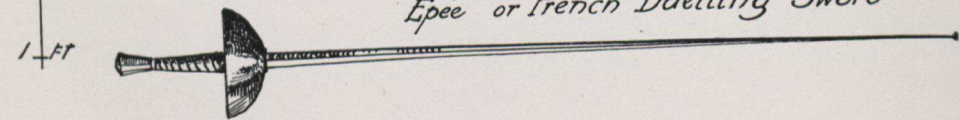
*Italian Foil*



*Infantry Sabre*



*Épée or French Duelling Sword*



intelligent movements, which by practice come as easy in reply to one another as spoken words, the execution corresponding to the pronunciation. This, the mere mechanical part of fencing requires constant practice, as it is not enough to know by an instinct gained by frequent repetition what to do. The movement must be executed *perfectly* to be of any avail, and it must be initiated instantaneously. Stimulus and reaction form the basis of the power to fence at all. The body must be trained to the pitch of Mr. Kipling's midshipman, who obeyed "not at once, nor immediately, but sooner, far sooner."

The art of fighting consists chiefly in dissembling one's intentions while fishing for information as to your adversary's natural, as opposed to his studied movements. Success depends among regular fencers (the term being used just as with regard to regular whist players) upon the power to analyse the adversary's play and to dominate the game. Strength and length are at a discount in comparison with speed, mental and physical. A fencer lives through the keenest sensations of fear, resolution, a climax of hope, crowned by complete satisfaction or dire calamity, during the progress of a single lunge. Of such things is made up the unintelligible shower of blows and rattle of parries which afford by virtue of their inherent logical beauty pleasure to many followers of the sport, to whom the higher understanding of the mystery of the battle is not vouchsafed.

As this article is intended rather for the spectator than the performer, a few words on the different kinds of fencing now practised in Europe may be of use.

The French have three weapons of fence. (1) *The foil*, which is to be regarded as a theoretical instrument of practice only. The target for foil play consists of the body between the hip-bone and the collar-bone. The blow is a thrust. (2) *The sabre*, for cutting and thrusting, which is simply a light blunted edition of the service arm. For practice purposes the target thereto belonging is the whole person above the hip-bone. (3) *The Epée de Combat*, or duelling sword, which for friendly fencing differs from the actual weapon only in that it has a blunted point. The target consists of the whole of the man *plus* his protective garments.

In Italy there are only two weapons taught. (1) *The sabre*, similar to that mentioned above, but with a play far more scientifically conceived. (2) *The Italian foil*, which represents the duelling sword of Italy, but on a lighter scale, and which is the direct lineal descendant of the great rapiers of the 16th century, having quillions round which the fingers are grasped to enhance the grip. This weapon lies nearly midway between the French *épée* and the *fleuret* or foil, partaking of



the lightness of the latter and the sternness of the former, for in Italy there is no theoretical practice weapon. Nothing is taught with the foil that is not right with the naked point. In Italian foil fencing the target is as in the French. Many of the rules with regard to validity of hits, however, are at variance in the two schools of foil, and this has caused a deplorable bitterness in the trials of skill between the champions of these two high-spirited nations. The great masters have usually had recourse to practical demonstrations in the long run.

Into the merits of the rival performances during the last few years we cannot enter here. Many pamphlets and articles have appeared on both sides, and the present position is a deadlock which can only be relieved by time and a new generation of champions on both sides. Franco-Italian international competitions have not been held for the last two years.

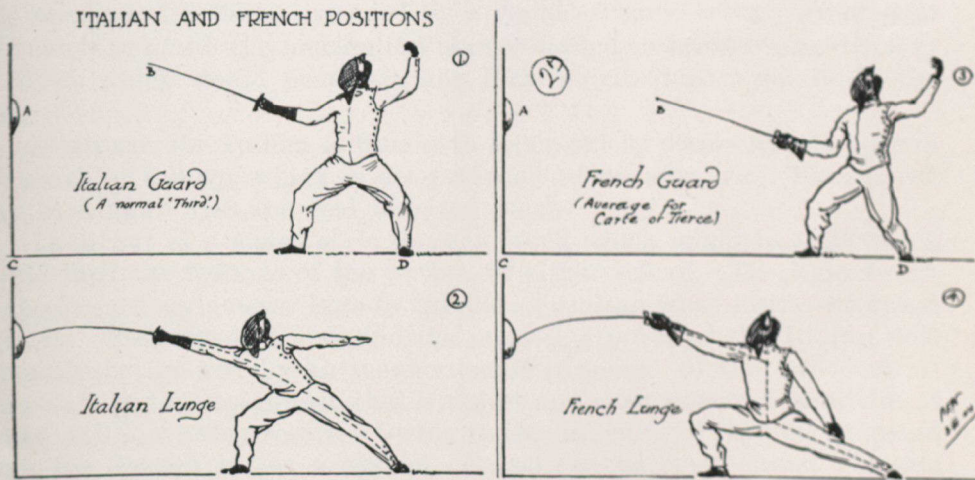
Of the rival systems, however, a few words may be penned with a view to showing that there is good in both.

The diagrams, 1, 2, 3, 4, show the essential technical differences. It will be noticed that the reach from the left foot is practically the same. The French point, however, travels farther from the more contracted guard positions to the target, a questionable advantage. The Italian hit is delivered with far greater momentum, owing to the disposition of the body behind the blow. The French lunge is claimed to be more rapid (which is difficult to prove); it certainly is more difficult to recover guard from than the other.

The Italian foil being provided with a cap lends itself to *double contact parries*, the adversary's blade being caught both on the opposing blade and on the edge of the cap. From this a great variety of movements may be developed which are impossible from parries with the blade alone. Also, the Italian parries with a more extended arm than does his rival, leading to guards on the low lines (see diagram of target). The French school may be said not to use the low parries—*second*, *octave*, *prime*, and *septime*—as with their contracted arm and high point the whole target may be adequately protected by *carte* and *tierce*. Thus we find in the Italian system a richness and variety of play which is quite beyond the range of the other school. The extreme simplicity of French foil play, however, leads to a higher standard of execution among beginners. A comparison between any standard book on French foil play and an Italian manual will satisfy the inquirer on this question of richness of play.

Now the Italian temperament is peculiarly adapted to teaching, and a fencing lesson by a *Maestro di Scherma* is a revelation of passionate

ITALIAN AND FRENCH POSITIONS



enthusiasm combined with patience, of tireless energy mitigated by gentleness, of fierce exertion controlled by sympathy. In the French teaching there is less art, equal patience and more exposition. The results are very different. The French fencer reacts, reacts like a machine, with deadly accuracy and extraordinary speed; but death-blows are not administered by sub-conscious logic. The Italian pupil is taught to think from the outset, and his ideal is to deliver a blow from out of distance by an advance followed by a lunge, as far as his legs are concerned, combined with a series of feints or actions against the adversary's blade. This requires foreknowledge of where that blade is going to be. The French do not combine the advance with the lunge, and their system of ruling regards the combined advance and lunge as two separate movements instead of the component parts of one premeditated attack. The velocity of a lunge preceded by a rapid advance is very great, and this combined with the momentum above alluded to leads to the delivery of blows which would penetrate any luckless rib that might be in the way.

Moreover, the Italian is taught to fence *out of distance*, i.e., beyond the reach of a lunge which is not preceded by an advance. That is the way men fight with the real *unbated blade*.

In favour of a mixed style there is much which might be said which would hurt the feelings of the purists of either school. The light touch of the French style never fails to trouble an Italian when first confronted with it. The extended arm and the menacing point of the Italian will certainly be ignored by an inexperienced exponent of the "theoretical weapon," and a straight hit, that simplest and most rare and beautiful of blows, will inevitably result. Owing to the difficulty of recovering guard from the French lunge, a system of modified parries against *ripostes* without returning on guard has been perfected. The pure Italian does not expect these movements; against some types of fencers they are the only key that fits. Examples might be multiplied, but enough has been said to show that if foil fencing is to be regarded as an initiation to swordsmanship, no fencer can afford to ignore the practice of systems other than his own.

One of the many popular misconceptions about fencing is that it is a game which may be played after a dozen lessons. The course of study for this game is a hard one, and many months of mere obedience and instruction and weary exercise against a pad must precede even the simplest voluntary or optional movements. Then by gradual stages the instructor will lead the pupil to intelligent actions, and later on to imaginary and composing attacks, and last, which only comes to some

and that after much application and practice, the faculty of interpreting the mind of the opponent. To the great masters, to fence with a man is to know his character. Temperament will show through all the rules of form and style when the actual attack is being delivered, and even if the exterior appearance be kept as blank as the face of a poker player, the very nature of the tactics adopted, the risks one takes or leaves, constitute an absolute self-revelation when one meets one's master.

For the benefit of any who may go to see a public assault, a few remarks on the main rules or principles of the play may be useful.

*The hit.* If A attacks B and succeeds in delivering a blow, which would penetrate if the weapon were sharp, on the target, a hit is scored. Any blow not on the target brings the *phrase* to an end. The hit is supposed to be fatal. Unlike boxing, it is not possible to take a blow for the sake of giving a better one. An attack consists of a feint or feints or an action against the opposing blade followed by an attempt to hit, rarely in practice of a single hit.

*The riposte.* If B parries A's attack and returns *immediately*, the blow is called a *riposte*. The *riposte* may be as intricate as the original attack. If this in turn is parried, A's reply is styled a *counter riposte*.

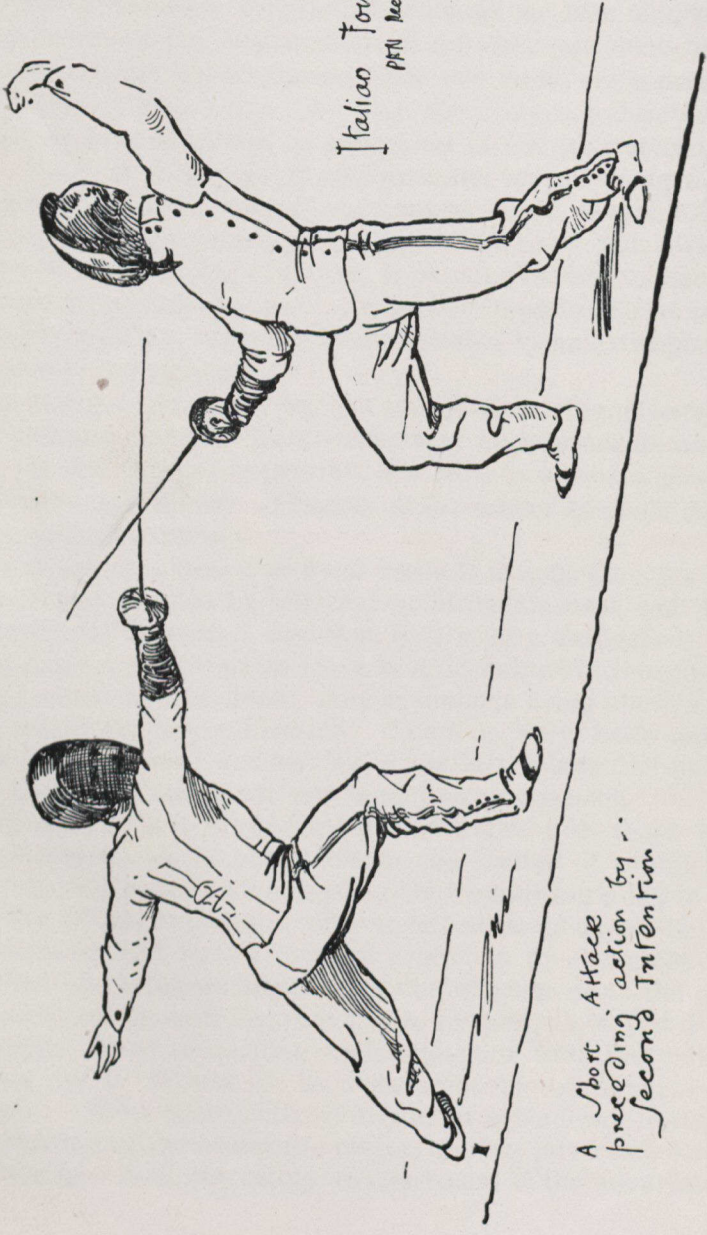
*The stopping thrust.* If while A is making feints B delivers a hit, this is a stopping thrust.

*The time hit* is delivered by B while A is attacking B's blade.

*The counter-action* is delivered by B on A's final, and is only valid if it is executed in such a way that B is wholly untouched.

*The coup double* results when both attack simultaneously with success, and counts against both. Any attempt to bring about a *coup double* should result in disqualification. There is very little satisfaction in running the adversary through while his hilt "plays dirl on your breast bone," and such tactics are not taught in any school.

Foil fencing is a game the rules of which put those of all other sports and pastimes in the shade in the matter of complexity. Many cases occur in which it is necessary before awarding a hit to inquire into the motive of the aggressor. For instance, a touch on the arm brings a phrase to an end, but it does not score. A touch on the arm may be due to bad execution on the part of the attacker or of the defender; in the latter case the arm may have been properly interposed even if subconsciously. It is in settling such questions that the vein of realism manifests itself. Would the blow have penetrated the arm and reached the target? Then, again, what if an attack is made while the adversary's foil is pointing at the attacker's target, and the adversary keeps it there? No matter how well the attack comes home, if the adversary maintains



Italian Foilplay  
PFTN Dec 1904

A Short Attack  
preceding action by --  
second Intention

his point on the line his hit will be valid, or if only a touch result, that will suffice to neutralize the attack. "It is unhealthy to run on your adversary's sword." If it is in the way, it must be displaced. Usually it is assumed that any blow on the blade will displace it and, so to speak, put the would-be attacker *on side*. This is a convention which leads to much meretricious sword-play. It is, however, impossible for a judge to know whether the blow was hard enough to deviate the point from the target.

With good fencers an attack has very little chance of coming home unless the moment for its inception is carefully chosen or worked for. "The attack must be made at the right time," says the *Maestro*, "or it will be parried." "And what is the right time?" "Ah! there you are! It is the right time; there is no definition for it," he adds with an engaging smile. "Some day you will know, in ten years perhaps, then you will hit them." This "right time" that will take so long to come by, and which will make a well executed attack irresistible is the psychological moment—the instant of time your adversary must delay between making up his mind to attack and doing so. In that instant he may be surprised into his natural parries; of these you have apprised yourself with sudden feints and short attacks. Your attack, lying as it were ready to be fired off, is designed to deceive these, the *natural parries*. There is a quiver of an eyelid or an arching of the back. The moment has come, let go at him. "Oh! hit or miss, how little it is." "That now is fencing," says the *Maestro*, as you bring off a remote approximation. Or, "The idea was good, but do it," as he sees your lips whiten with vexation as a possible moment of "right time" flits past unused to the limbo of good intentions and lost opportunities.

Such was the running comment of Guiseppe Magrini criticising the loose play of his cosmopolitan gang of pupils in London, and this brings us to the history of a great school, now, alas, in evil plight, but still so potent a force with those who know its mysteries that the name of Masiello is a password to good company in all the great cities of Europe and some in America. Have pamphleteers not branded us as "Masielloists or Leopards?" Have war ministers not decided to root out the heterodoxy? Therefore all who learned to lunge at the "high altar," as they call the little room off the big *salle d'armes*, where the Cavaliere Ferdinand Masiello breaks in his likely pupils, are bound together, having endured, besides much despite from other schools, the woes of an initiation by "il Torquemador" himself.

The renaissance of fencing in Italy followed the war of '66, and the name of Ferdinando Masiello is so bound up with this revival of a glorious

Italian tradition that it is difficult to say whether the man made the art or the art the man. It must be remembered that in the fourteenth century Bologna was the great fencing school of Europe. Thither the gentlemen of all nations who could afford it repaired to study "secret hits" and "universal parries." The weapon was the quillioned and cap-hilted rapier, ancestor of the Italian foil of to-day. The fencers of that time displayed the same zeal in pursuit of new attacks as was manifested by alchemists in the search for the elixir of life. When the glory of the Bolognese school departed, the court of France became the fencers' paradise, and a great many hundreds of thousands of gentlemen fell in the course of a couple of centuries in order that the art might develop by gradual stages till the French school of to-day was evolved.

It is as much to the patriotic passion of the "Risorgimento" as to any personal effort that we must attribute the revival of a distinctly Italian School of Fence as part of the military system of the new monarchy. The first protest against the decadent school then pervading all Europe is to be noted in the work of Radaelli, a staff sergeant, who though illiterate had a wonderful faculty for applying scientific principles both anatomical and geometrical to the use of the sword. From Radaelli, Masiello got the principles which he developed and codified in a monumental work. But before the book was thought of, Masiello and his system had to stand the stress of a mutiny against the then accepted official system of Zangheri, and a contest with the Baron of San Malato, which took place at the Scala in Milan. The baron was beaten in public and in the duel which followed, and the great exponent of the Radaelli system carried all before him till 1883, when the founder died. Then the many enemies of Masiello (and his world is made of friends and enemies) compassed a great injustice, to wit, the appointment of another to succeed Radaelli as chief fencing instructor in the army of Italy. The great artist retired from the service, and in '94 it so befell that Colonel Fox, chief inspector of gymnasia in our army, decided to reform the poor system of sword exercise then in force. Masiello was unearthed, and with the aid of Magrini, at that time amateur champion of Italy with the sabre, a new body of staff instructors was trained at Aldershot.

Such in brief is the history of the greatest phase of fencing, now unhappily on the decline. With bitterness in France, a hostile official school in Italy, and the sword discredited in our army, the school of Masiello looks back rather than forward to its greatest achievement. During the nineties there was no question about the supremacy of the Italian school whose champions visited Paris with disaster to her

swordsmen, though greatly for the ultimate good of French swordsmanship. And in Italy the pupils of Masiello carried all before them.

Now we reach the point for dealing with another popular illusion, the last, the greatest. The galaxy days of swordsmanship are not in the historic past. True, the first flush of the Italian renaissance is over, but others will arise to carry this art, science, sport, call it what you will, to yet higher planes. We know exactly what the men of old time practised. We have their fencing manuals; we have accounts of their duels. When masks and foils were not, practice as now understood could not be. We moderns study our moves to perfection with a blade and a moving target before us. Our forebears got such exercise only at peril of their lives. Fencing as opposed to fighting was, therefore, a slow and precise exercise. Precision could be practised, speed and cunning in the art had to be born with a swordsman or be done without. Your Crichtons and Bergeracs would cut a sorry figure before a Pini or a Kirchoffer, for the modern masters are as brave as they are skilled. But what can a mere statement convey of the glorious artists? Their work must be seen to be appreciated. The perfection of their bodily movements is only the gross reflection of their activity—rapid and accurate. The interpenetration of solid figures requires some slight degree of mental power to compass. To apprehend the interruption of whirling radii and zigzagging points by conical gyrations or parallel movements of an oblique line where speeds and accelerations have to be taken into account, is quite a mental feat when shown the way with infinite tact, patience and endurance by an enthusiastic professional artist in murder. To discover new mysteries, compact of physiology, mechanics and practical psychology as the great professional fencers do, is at least to be living on a high plane. For the ordinary man the mental gymnastics of Euclid might very well be dispensed with, and the preliminary movements of fencing be substituted in his education.

In all its aspects, as mere exercise, recreation, applied mechanics, gymnastic for the mind, and school of manners, as a training in co-ordination of action, self-control, deception, strategy and sportsmanship, this science, art and sport is too good a thing to drop from our civilization, even if we do not duel.

The professional who really knows his business is an artist and should be treated as such. No better men are to be found upon this mossgrown planet, and none live by a harder earned wage or buy success with keener effort.



## THE AIMS OF THE MCGILL UNION.

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A university celebration can be held at almost any time, so long as the sacredness of the decimal system is held in proper respect. On the one hand the University of Bologna observes with great pomp its eighth centenary, while on the other the University of Chicago issues an imposing set of monographs on the occasion of its first decennial. In certain localities a seat of learning is thought to be moribund if it does not have a round of oratorical festivities every twenty-five years, and it is a distinct mark of conservatism to celebrate only the half century.

Last year McGill had in the seventy-fifth anniversary a decent excuse for displaying her glories to the academic world, and there was serious thought of commemorating by public exercises this stage of her development. In the end seventy-five seemed a somewhat irregular number and the project of holding a celebration was given up. However one solid fruit of 1904 remains in the McGill Union. Not improbably we should have had something of the kind without any burst of anniversary sentiment, but as a matter of fact the idea was first put forward in connection with this special occasion. According to the original scheme the Graduates were to raise \$75,000 for a building, the Governors having stated that they would be willing to accept such a gift. On the present basis, as is well known, Sir William Macdonald is providing a much finer building than the Graduates ever hoped to erect, while the contributions of the Graduates will go towards meeting the cost of maintenance. More was needed than the enthusiasm awakened among the Alumni by the seventy-fifth anniversary, yet the origin of the Union will always be associated with the year 1904.

Before another number of the Magazine is issued, the walls of the Union will have been completed, and the close of next session should see the undergraduates well housed in their new home. If the hopes now entertained are at all realized this building will be among the most useful of our possessions, and without rival in the hearts of the students. To predict that it will accomplish everything which the most sanguine expect might seem idle, but one may seize the present moment to set forth the purpose which it is intended to serve and to describe such plans as

have been formed to secure the realization of the main object. That a few statements are needed regarding the scope of the Union may be inferred from a single case of ignorance. Not long ago a graduate on being asked for a subscription replied that the students were disorderly enough already and that he would give nothing to further a closer organization of them than existed. Apparently the Union meant to him a society of undergraduates brought together for the sake of promoting disturbance—in fact a kind of academic labour-union.

Those who have the least familiarity with the beginnings of McGill will be able to understand why the University has not as yet reached the stage where student life becomes a distinct and separate thing. At Oxford and Cambridge, at Harvard and Yale, the undergraduate enters a world in which one interest is paramount. Detached from society at large he lives for three or four years in a peculiar atmosphere. It is not merely a question of books and study, or of athletics and college amusements. Many elements combine to give undergraduate life a quality of its own where students are thrown together by residence in halls and dormitories. Now McGill, for obvious reasons, has been unable to give its students all the things which older universities, situated in richer countries, possess. At many other centres residential accommodation has been provided first and the wants of the curriculum have been given second place. At McGill large amounts have been expended to enlarge and improve the curriculum while student life has been relegated to the background.

Even without the help of a residential system the undergraduates have done a good deal during the last ten years to build up college traditions and provide for themselves richer memories than their predecessors possessed. What part the Greek Letter Societies have had in contributing to this result is a separate question, but at least they represent private initiative and a desire to promote closer intercourse. The objection usually brought against them is that they foster the spirit of clique. Here again a separate question comes in since small groups are as certain to grow up in a college as in the outer world. The rise of Greek Letter Societies at McGill is simply one symptom out of several which all point in the same direction, namely, towards the need of establishing more intimate social relations among the students than have existed in the past.

The warmest friend of the "fraternity" idea could hardly claim that chapter-houses are likely ever to fill the whole field or give the mass of the students the means of getting into close touch with each other. For a large number of reasons these sodalities are not apt to take in at any time more than a quarter of the undergraduate body, and the ends

which they contemplate are private rather than public. The Union, on the contrary, is to be a meeting place for all the students and a rallying point for all the secular activities which go on under the university name. As the head-quarters of the Literary Society, the Athletic Association, the weekly paper and the departmental clubs, it would be a place of daily resort even though no provision had been made for a dining room, a billiard room, a lounging room, or for baths at the bottom of the building and an assembly hall at the top. No student, however shy, will find obstacles put in the way of his admission. No student, however ambitious, can fail to discover scope for his talents in the administration of the societies which will centre at the Union.

According to general belief the institution which has developed slowly is better grounded than the one whose equipment is complete from the start. In certain cases a University Union represents the work of generations, by virtue of the fact that around a small nucleus manifold interests have gradually gathered. The debating society is the commonest point of departure, reading rooms, a library and dining accommodation being added at successive stages. Where the process of growth is thus gradual the students are pretty sure to gain an adequate grasp of administrative methods during the period of expansion and may be counted upon to manage the affairs of the enlarged organization with success. At McGill, of course, the Union is being launched like a new ship and we must wait to see whether it will be well officered. Fortunately there is a large number of students to draw from and the first members of the executive will probably be chosen under a due sense of responsibility. This is an important matter, for the Union is looked upon by those who have thought about it most, not merely as a building, but as an institution. The training in self-government and responsibility which it ought to give should be of the utmost value to many men and inspire a sense of confidence in dealing at a later period with larger issues. If the McGill Union represented the fruit of long and sustained effort on the part of the students, that fact of itself would furnish cause for congratulation. As it is, we may remember the analogies afforded by the Harvard Union and Houston Hall at the University of Pennsylvania where the work of administration has been taken up *ab initio* by the undergraduates under circumstances similar to those which have attended the creation of the McGill Union.

Every one has his own ideal of what college life should be and what incentives the student should gain from it. But regarding one thing there can be little doubt. Closeness of association is needed to bring out the play of wits, to kindle affections and to endow the undergraduate

with a capacity for human intercourse. An institution like the Union does not work automatically. Some responsiveness on the part of the students is required and doubtless will be forthcoming. Nor is the Union a final goal, even should it fulfil all reasonable expectation. It is simply one important step which has been taken to promote a sense of kinship and solidarity among the classes and faculties of a large university. Nothing short of a complete residential system can be looked upon as the great objective; but until means can be found to erect a suitable group of halls or colleges the Union should prove a true boon. And under no circumstances can it prove superfluous. However much McGill may grow and prosper in the future, the Union will always stand for and contribute to collective effort. Other societies and fraternities may do excellent work and appeal to sections and classes of the students. But from first to last the Union is common ground for all.

C. W. COLBY.

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## CONSTITUTION OF THE UNION.

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Before explaining the draft constitution of the Union it must be stated clearly that it is at present only a draft. The original suggestion came from a committee of the graduates, and it is felt that before any final scheme is sanctioned this committee should have every opportunity of expressing its views upon the constitution. There is no urgency in the matter, and the present draft is to be circulated among those interested in order that it may receive the fullest consideration.

It is never an easy thing to lay down in black and white the rules which shall govern any association, however simple its character, or familiar its objects.

If the constitution of the family, and the rules for its government had to be considered and stated afresh whenever two young people got married, many such proposed unions would be given up. No one, therefore, will be surprised to hear that a good deal of time has been spent on discussing what should be the constitution of the McGill Union, or that the discussions have evoked some differences of opinion. The constitutions of other University Unions on both sides of the Atlantic were

studied with advantage. But, as judges are fond of saying, "every case has its own physiognomy." The circumstances were nowhere quite the same as at McGill. In some places the property of the Union was vested in a special Board of Trustees, created for that purpose, whereas our Union is to belong to The Royal Institution for the Advancement of Learning, *i.e.* the Governors of the University. In the constitution of our Union, therefore, it was not necessary to make any provisions as to capital.

Again, in some places, the character of the Union as a club was accentuated by regulations as to the election of members. Upon this point there was a pronounced division of opinion in the committee of the Academic Board upon which the duty of preparing a draft constitution had been devolved. No one suggested for a moment that the Union should be made in any way a close body, admission to which should be a matter of favour. But the view was strongly urged that some little formalities of nomination and election might increase the prestige of the Union. The view, however, which commended itself to the majority of the committee, and of the Board, was that no form of election would have any value which did not involve at least the possibility of the rejection of a candidate for admission. Accordingly, it was thought best to state frankly that any member of the University should be entitled to admission to the Union on application, and payment of dues. In regard to the amount of dues it was agreed on all hands that a sum as low as possible should be fixed for students, while other members might be called upon for a somewhat higher fee. The whole scale, however, is so low as to exclude nobody.

The membership is divided into four classes, *viz.*:

1. Active Members, *i.e.* students, whether full undergraduates or partial students.

2. Associate Resident Members, *i.e.* members of the University other than students, and also former students residing within a radius of ten miles.

3. Associate Non-Resident Members, *i.e.* the same classes as in 2, but residing outside the ten-mile radius.

4. Life Members, *i.e.* Members who after four years should choose to compound for the future by paying a sum down.

In addition, the title of Foundation Members, with all the privileges of life-membership, is offered to those persons who subscribe a hundred dollars before the Union is opened. It is confidently expected that many friends of the University who have an eye for a business proposition will

lasten to take advantage of this generous offer. As to less ambitious classes we have tempered the wind to the shorn lamb. Students will have to pay only two dollars a year and non-resident members the same. Associate Resident Members will pay five dollars. With regard to the fee for Life Members there was a good deal of discussion. The original suggestion was to make the sum twenty-five dollars. This was considered by many as too small, and fifty dollars was spoken of. In the end a hint was taken from the Cambridge Union, and it was resolved to compromise by providing that a member who has paid his dues for four years may compound for further annual payments by a sum of twenty-five dollars. The effect of this will be that a student who has paid four subscriptions of two dollars each may, if he chooses to compound on graduation, become a Life Member for a total cost of thirty-three dollars. An Associate Resident Member who has paid four subscriptions of five dollars each will pay forty-five dollars in all for the privileges of life-membership. It must, of course, be remembered that of the total number of graduates it is only a rather small percentage who take up their residence in Montreal. Moreover of the Associate Resident Members there are pretty sure to be a good many who will join the Union out of university patriotism, if the permission is permissible, but whose avocations and interests will not allow them to make any very regular use of the building. But for these considerations there would be reason to fear that the premises might be flooded with a class of men whom the students, with the happy insolence of youth, would regard as old fogeys. One advantage of the solution arrived at is that at the first no one will have a vested right to life-membership. At any rate if any one claims that he has such a vested right an interesting legal question will be raised, and that is in itself a desirable thing.

If, after one or two years experience, any flooding by old fogeys is perceptible, the fee for Life-Members can be increased.

Perhaps the greatest difficulty was felt in drafting the provisions as to financial management. On general principles the more the students realise that the Union is in their hands, the more likely it is to fulfil the purpose of its generous founder.

On the other hand the business of catering on a large scale is one which requires special experience, and is, at best, attended with considerable risk. A body of students would not choose to be burdened with this responsibility, nor would it be wise to entrust them with it. It is proposed, therefore, that there shall be a paid secretary-treasurer appointed by the Board of Governors of the University. He will be the

club-manager, will keep the accounts, order the supplies and—what no one will envy him—look after the servants.

It will, probably, not be easy to find a man able to discharge these duties efficiently, and at the same time, which is also important, to maintain friendly relations with the students in general, and with their committees in particular. And yet it is inevitable that the initial success of the Union will, in no small measure, depend on discovering such an officer. Professors, it is often thought, grow on every bush, but a good club-manager is born not made.

The financial management has been further safe-guarded by the creation of a so-called Advisory Board.

This is to be a Board of six members, appointed by the Board of Governors, and retiring two at a time in rotation.

They are to have a general supervision over the student-committees, for which detailed provisions are made, and to act, in a sense, as a court of appeal from them.

I have now given a pretty full account of the main features of the Constitution, as they present themselves to me.

In conclusion I may say that the success of the Union, and its influence upon the life of the University will depend, first and foremost upon the energy, the talent, and the good-will of the whole student-body. If they take it up, as there is every reason to hope, in the right spirit, the opening of the Union will mark an epoch in the history of McGill University.

F. P. WALTON.

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## THE CAMBRIDGE UNION.

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The Cambridge Union Society took its origin in the beginning of last century as a union or amalgamation of several debating societies which had previously existed amongst the undergraduates of Cambridge University. Whilst in general such societies were confined to the members of one college—there were and still are quite a number which included members of several colleges. One of these, a small society called the Kingsley Debating Society was flourishing fifteen or sixteen years ago when the present writer was an undergraduate. Out of a number of these

the present Union Society was constituted, and its main object was to hold debates, and to maintain a library and reading-room. Within the last few years it has added to these functions the management of a refreshment room; but although this has been effectively and economically done, it is a very subordinate function, for the numerous college kitchens render possible the supply of hot meals in the student's own rooms at almost any hour—and so the necessity of the Union undertaking this work was never very urgently felt.

The cost of the present buildings is about \$100,000, but they were not all built at once. The money was raised partly by subscription, but the greater part consisted of a loan from Mortlock's Bank—an old established local bank which held most of the University funds on deposit and whose manager is a graduate.

From the first the Union adopted the principle of the open-door. Any member of the University could become a member without election, simply on the nomination of another member and the payment of the entrance fee and subscription. There is no distinction between various classes of members, and all alike can vote for the election of officers. There are three terms in the academic year, and a fresh group of officers is elected each term so that the crowning glory of being president is enjoyed for a period of only two months. The officers elected every term are the President, Vice-President and Secretary. The Vice-Presidency is no mere ornamental post as it is under the United States constitution and the Canadian imitations of it. Whilst the President is the supreme authority as the interpreter of the rules, the Vice-President has the practical management of the house and gives directions to the employees and is the recipient of the numerous complaints of the members. A Treasurer is elected every June, as is a Librarian. The Treasurer must be an M.A., and the Librarian generally is. The Treasurer is obliged to express his approval or disapproval of every proposed expenditure over \$25, and if he does not sanction it, it can only be carried by a three-fourths majority at a private business meeting. A proposal involving an expenditure over \$100 can only be brought forward at a special private business meeting, after the Trustees have been consulted. The Trustees are a body of senior members of the University, corresponding to the professoriate of McGill, who are the legal holders of the land and buildings of the Society, but they are appointed by the Society. It will be noticed that neither the Treasurer nor the Trustees have the power of veto: they have only the right and the duty of giving their opinion as to the advisability of the expenditure. Like the great University from which it has



sprung the Union is essentially a democratic society. It might be thought that a mere academic opinion would be quite inadequate to restrain the rashness of a body of undergraduates inexperienced in finance, but in practice it is quite sufficient. The Treasurer or Trustee can always bring pressure to bear by resigning, and then the bank will become uneasy and begin to hesitate about renewing the mortgage. The fact that the Union has been built and equipped almost entirely with the students' own money makes them very careful how they involve themselves in expenditure beyond their income. There are but two committees in the management of the Union: the Standing Committee and the Library Committee. The latter committee is nominated by the Librarian and it has charge of a library of over 20,000 volumes including all the standard works of fiction and indeed almost every good book of general interest; but it is a rule that works appealing only to specialists are not purchased. Any book demanded by fifty members, if of a class which is suitable to the library, is purchased. The Library Committee recommend books for purchase, but the Society decides.

The Standing Committee is elected as are the President, Vice-President and Secretary, every term. It consists of six members in addition to the officers and it is the Executive Council of the Society. Its duties consist in formulating a policy with regard to every motion proposed at a private business meeting: any member can propose a motion, but the Standing Committee advise the Society whether the motion ought to be accepted or rejected, and this advice is generally but by no means always followed. Further the Standing Committee regulate the wages of the employees, choose the tradesmen who are to be dealt with, and choose the subjects for debate at public meetings. A member who has been elected three times on the Standing Committee or who has held office, is *ex officio* a permanent member of the committee. Members of the Standing Committee take seniority according to the number of votes recorded for them at the poll.

The public debates are held every Tuesday during term time. The debating-hall is the largest hall of the building and is arranged like the House of Commons. The cushioned seats or rather lounges for members are divided into a set for the proposer and his supporters and a set for the opposition, and they face each other. The President's chair is on a raised dais at one end and in the middle of the floor is the Secretary's desk. The President gives the signal to commence proceedings by calling on the proposer of the motion to address the House. Only the proposer and opposer are arranged beforehand. Other members desiring to speak

signify the same by rising in their places and the President selects the member he prefers by bowing to him. No one is ever alluded to by name, members taking part being designated by the name of their college, as for instance "the honourable member from Trinity."

Meetings for private business deal with proposals for expenditure and with changes in rules. A change in a rule requires a three-fourths majority, and so does proposed expenditure unless sanctioned by the Treasurer and Standing Committee. The same form is observed as in public debates. It will be seen that the essence of the Cambridge democratic spirit is to put in the hands of its committees only advisory power, the final decision resting with the members. The power now in the hands of the Standing Committee of regulating salaries is a recent innovation, due to the inconvenience which was felt to be caused by the discussion of such matters in a large meeting and the impossibility of keeping proceedings under such circumstances private.

Besides a Library and Debating-hall, the Society has a large writing-room, where paper and envelopes stamped with the names of all the colleges are supplied, and two splendidly equipped magazine-rooms in only one of which smoking is permitted. The present writer had much more opportunity of seeing the leading American reviews when in Cambridge than in Canada. Of the refreshment-rooms little need be said. The service most appreciated is the provision of afternoon tea in the magazine-rooms. The Society has always voted down any proposal to have a billiard-room, not because there is any prejudice against the game, but because the members consider that the probable accompaniments of such a room, the playing for stakes, etc., would be considerable.

To sum up, the Cambridge Union Society is an exceeding comfortable well-managed club, which gives unbounded opportunities for reading and culture to its members, but which makes no pretence of supplying what would be called amusement, that being furnished elsewhere. It is essentially suited to quiet studious men, such as properly make up the mass of the membership of the great University.

E. W. MACBRIDE.

## THE HOUSTON CLUB OF THE UNIVERSITY OF PENNSYLVANIA.

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The University of Pennsylvania is, so far as I know, the first institution in America to offer its students social life and indoor recreation on a large scale by opening for their use a commodious and well-equipped club house in the midst of the University buildings, where it is easily accessible to students of all departments, and by making the cost of membership within the reach of practically every student. The idea of a students' club house was first started by the university branch of the Young Men's Christian Association. The committee had in hand the raising of a fund and with infinite labour had secured pledges to the amount of \$6,000. At this stage of progress Provost Harrison, then a Trustee, secured \$100,000 for the work, a donation by Mr. H. H. Houston. The building was at once begun, but before it was finished, Mr. Houston died. Provost Harrison afterward secured from his widow a further gift of \$50,000, which was required to complete and furnish the Hall now appropriately known as the "Howard Houston Hall," in memory of the son of Mr. and Mrs. Houston, a brilliant student, who died during his college course.

The club is conducted on the same liberal plan as are all large club houses in great cities, the only exceptions being that no wines are permitted in the building, smoking is not allowed above the first floor, and the building is closed at 10 p.m. The plan of structure was the result of competition among architects and was won by two young graduates of the University, who were in hearty sympathy with the undertaking. The location is central, and is surrounded by some of the most attractive features of the campus and by the college buildings, that border it. It is designed in the transition style, from Gothic to Renaissance. The walls are light gray stone, relieved by Indian lime stone which enriches them. It is amply lighted by the many broad mullion windows, which characterise this style. Carved detail has been sparingly used and is in evidence only in a few shields bearing the University arms, and in the initials of the donors. Broad terraces paved with marble tiles and surrounded by balustrades extend in front of the entrance doors both on the north and south side of the building, and afford convenient meeting places for students in fine weather. Within the door at either

entrance is a roomy vestibule finished with a high wainscotting of panelled oak and surrounded by seats of the same material. From the inner doors one is ushered into the centre or the reception room, massively decorated in old oak, with tables, chairs, and easy-couches uniform in this respect. Wide fire places at either end of the room make the large space doubly inviting in cold weather with their fires of blazing logs. Widely arched doors at the east end of this reception room lead into the reading and correspondence rooms. Long lines of reading tables stocked with the periodic literature of the day are well patronized, both day and evening, and there are plenty of quiet nooks where a reader may keep to himself. At the western end of the main reception hall are found the billiard, pool, and chess rooms, with seven billiard tables, and a full equipment of chess tables. On the south front of this floor are the business offices of the club, and the hat and coat room.

Two broad oaken stairways lead to the second floor. This second floor hallway is almost as spacious as the one below; its walls decorated by prints and photographs, and its furniture rich and comfortable. At the eastern end a door opens into the auditorium, a fine hall, with a seating capacity for 600. At the north end of this room is a proscenium arch and stage, backed by a large and exceedingly handsome pipe organ. Services are held here every Wednesday evening during the college year, different speakers being introduced. On the south (front) side are the trophy rooms, in which are high framed cases, containing the records of many athletic victories won by teams and crews, both of earlier and more recent dates. The western end of the hallway opens into the lunch room, where a light lunch can be obtained. The third floor is divided into numerous offices, meeting and committee rooms; two of which are occupied by the editorial staff of the University's journals. There is a special room set apart for the camera club with dark room for developing purposes. In the basement are situated the barber shop, bowling alley and swimming pool with locker rooms and a room which was used as a gymnasium until the present gymnasium building was opened. It is now proposed to use this space, as well as the swimming pool, for other purposes.

Such is a hasty description of Howard Houston Hall, and it is doubtful if any of the larger buildings that surround it is capable of producing more lasting results. It stands for all that is purest and best in college life; for the University is not content with providing for the intellectual needs of its students only, but must now take into consideration their physical training and recreation. A gymnasium is now re-

garded as an essential part of a University's equipment and to the campus designed for athletic games and intercollegiate contests, the better equipped institutions are adding spacious playgrounds to accommodate the larger proportion of the student body. But these facilities do not fully provide for the purely recreative and social side of a student's life, particularly in a climate where most of the college year must be spent indoors. It is of the utmost importance that the more attractive forms of recreation be provided, and that they be freed from objectionable features that have given a bad reputation to such games as billiards and pool, or even bowling, on account of the surroundings in which they are most frequently practised.

While it has been of estimable value to the student body, and is thoroughly appreciated by them, there are certain practical difficulties in its management. It has been found that many who have not paid their membership fee, continually make use of the building, and it is now under consideration to make the fee a part of the general fee for tuition. By doing this, it is expected that it can be reduced from three to two dollars.

As Pennsylvania has not, until this year, had the advantages of an adequate and attractive Gymnasium, the opening of the new building with its constant succession of competitions and exhibitions in the gymnasium hall, in the swimming pool, and in the fencing room, has seriously told upon the attendance at the club, but notwithstanding these minor points it has filled and will continue to fill a large place in the life of the Pennsylvania student.

R. TAIT MCKENZIE.

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## THE HARVARD UNION.

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*"A house open to all Harvard men without restriction and in which they shall stand equal — a house bearing no name forever, except that of our University":* Such is the brief statement of the policy upon which the Harvard Union rests, introducing a modest and simple announcement setting forth the advantages presented to every Harvard student by the Union.

A well known Oxonian visiting Harvard in 1895, was led to comment upon the social life which he found there in the following terms:—"How

happy would a university be where, with a perfect system of subordination by which merit is sure of recognition, should be combined the social life and friendly intercourse and all the opportunities for the interchange of thought and knowledge which are found in every one of our Oxford Colleges! Each one of them is the gathering place, the home, of a small knot of learned men. Each of the Common-Rooms is a centre of kindly feeling and hospitality. Of these we have twenty; Harvard has not one. It will be easier for Oxford to take to herself all the good that there is in the Harvard system, than for Harvard to add to her vigorous and admirable organization all that charm and pleasantness of life which make an Oxford man's College scarcely less dear to him than Oxford herself. By an Act of Parliament the one reform can be in great part effected; the other could only come about by the slow changes of years." Were this friendly critic who, in the main, secured a very accurate and sympathetic insight into the spirit and life which animate the leading American University, to revisit Harvard to-day and enter the hospitable doors of the Union, he would not be able to discover so great a difference between the two institutions he compares, but rather would he find abundance of evidence in the living room and in the library, of that kindly feeling and hospitality to which he attaches so much importance, while he would also be able to participate in the social life and friendly intercourse which he rightly esteems as one of the most valuable features of student life; and, more, he would realize that the reform he deems possible only through the long changes of years, have already become accomplished facts because they were then, as they had been for years past, strong potentialities which needed but a spark to give them active life and substantial form.

The Harvard Union cannot be regarded either as an imitation of similar student institutions elsewhere, or as the expression of a need which has only become a recognized factor in student life of late years, but rather that, like Houston Hall at the University of Pennsylvania, it "is doing for the social life of yet a greater number what the dormitories are doing for the physical comfort, health and moral surroundings of a part of the students." It is the natural and logical expression of forces which have been in operation since the very foundation of the College itself, but which have only attained to their full development under the conditions of modern life as imposed by a large and diversified student body for whom existing organizations failed to offer the special opportunities and the democratic atmosphere demanded as complementary factors in the general scheme of education. In the early

days of the American College, when the students were few in number, the dormitory system with all its opportunities for free, social intercourse, amply provided the requisite balance to the more serious aspects of severe study and strict discipline, and sufficed to establish upon a permanent basis the necessary moral atmosphere.

With the augmentation of the student body, the expansion and broadening of activities in many new directions and the introduction of greater diversity in habits of thought and taste, the necessity for more special opportunities for "interchange of thought and knowledge" became imperative, and we therefore find numerous independent student organizations instituted, the fundamental purpose of which was to deepen and strengthen the intellectual life. These societies, then, fulfilled the same purpose as the Common-Room at Oxford, a relation which Dr. Hill failed to appreciate at its true value. Such bodies, however, quickly became selective in a somewhat strict sense, and a veil of secrecy and mystery was thrown about them with a view to making membership more eagerly sought for. Such local societies later extended to other colleges where chapters were formed, but owing to the strictness with which their initiations were conducted and the secrecy which always attended their proceedings, the real object of such fraternities was lost to view and the general public came to regard them as representing the more frivolous side of student life—a view too frequently justified by the abuses which often crept in and brought the local chapter into disrepute even within the limits of its own constituency. Of all such student organizations at Harvard, the Phi Beta Kappa is the most famous, as it exemplifies, in the best manner, the place which such societies hold in the student life. Founded in 1779, its proceedings were conducted in secret until 1831, when the veil of mystery was raised and the world recognized its true function in the motto "Philosophy, the Guide of Life"; and to-day the oration which is annually delivered before the Society at Commencement, is rightly counted one of the chief intellectual attractions of that very noteworthy occasion. Finally, with the further growth of the student body and its necessary tendency to greater segregation, existing clubs, even with their great extension in number and membership, failed to meet the steadily growing and insistent demand not only for more and better opportunities but for a strong centralizing force which should give to all Harvard men without distinction free opportunities for equal standing in all those activities which go to make the fully developed, well balanced man capable of assuming and maintaining his place as an intelligent citizen; for, as President Hadley has

very correctly stated on a recent occasion, "The American College tries to furnish a liberal education in the old Greek sense of the word—an education which fits the student for the use of liberty and enables him to understand the duties and privileges of a free citizen," since "the American public does not regard the college course as an aggregate of recitations and lectures which can be reduced one-fourth or one-half without altering the essential character of what is left, but as a complex social institution where the outside activities count for quite as much as the work of the classroom, and in which the cutting away of a single part leaves the life of the other parts disturbed if not destroyed." This is the place the Union fills, and this is the real motive for its existence. There is no antagonism whatever between it and the other student organizations, nor is there any barrier imposed by differences of wealth or station, since, as a matter of fact, the members of the various fraternities here meet with those who are strangers to such associations, while the rich and the poor experience no sense of disagreeable differentiation. In a word it is, in the terms of its generous founder, Henry L. Higginson, "A House open to all Harvard men without restriction and in which they shall stand equal." A strong tribute to its usefulness and the important place it occupies in the University life is shown in the rapidity with which it has gained in membership. Opened at the beginning of the College session in 1900, there were in December of the following year only 2,627 active and associate members out of a resident University population of 4,200; but the returns for 1903-04 show a membership of 4,500, representing about 82 per cent. of the entire student body.

A special feature of the Union is to be found in its centralization of all student interests. The *Harvard Crimson*, *Harvard Monthly* and *Harvard Advocate* all have their editorial rooms and printing offices there, while provision is also made for the various musical, literary, debating, social and scientific organizations whose members are not necessarily members of the Union. A well furnished grill room provides meals of excellent quality both *à la carte* and *table d'hôte* at very moderate rates, being supplemented elsewhere in the building by a lunch counter which affords ample provision for those who for any reason may not care to avail themselves of the more generous resources of the regular dining room. Special provision is also made for the various crews and athletic teams, and men in training may be seen there at all times during the season. That the Union is "able to serve very acceptably dinners such as, under former conditions would have been given in Bos-



ton" is evidence that it has been instrumental in effecting a most desirable reform in former customs. The usual accessories of a well appointed club, such as are to be found in a well stocked library; a reading and writing room; abundant games; billiard rooms, and a few bedrooms, which are at the disposal of members for limited periods of occupation, give an atmosphere of home life and comfort and enjoyment which abundantly satisfy both the mental needs, through recreation of the most wholesome sort. In the words of the announcement which each student has placed in his hands upon his entrance into the College, "It is the aim of the Union to be useful, if not indispensable to all college men. But it cannot wholly fulfil its purpose until every Harvard man feels it his privilege, by giving the Union his support, to help bind all Harvard men together, student with student, graduate with undergraduate, in the strong wholesome bond of a common loyalty. Everyone who joins the Union is certain to receive many benefits; but he should also seize the opportunity it offers him to do his share towards fostering the best ideals of comradeship and the true Harvard spirit."

D. P. PENHALLOW.

## STRATHCONA HALL.

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For several years no accession has been made to the fine group of buildings which has grown up around our College campus. A handsome and spacious hall is now, however, being erected in a very prominent position directly opposite the College gates and will form a noteworthy addition to the group of buildings which cluster about the University grounds.

This building with the lot on which it stands represents an expenditure of considerably over one hundred thousand dollars and has been erected by general subscription on the part of the citizens and former residents of the city of Montreal. The Chancellor of the University, after making careful inquiries, has marked his approval of the work by subscribing thirty thousand dollars towards it. While larger sums have at times been given to McGill by individual donors, this sum is by far the largest amount which has ever in the history of the University been raised by general subscription for University purposes, and the fact that it has been subscribed shows that the people of Montreal are not an "unsympathetic plutocracy", as has recently been asserted, but can be interested in a very practical way in University work.

Notwithstanding the many and generous gifts which the Chancellor of McGill has at various times made to the University, no University building bears his name. He has, however, consented to allow his name to be associated with this new building, which will accordingly be known as Strathcona Hall. This is especially appropriate, for, quite apart from His Lordship's position in the University and his generous benefactions to it, there is no one whose long career of public service—always upright, honourable and inspired by the highest spirit of true patriotism—affords a more worthy example or supplies a keener incentive to the young men of Canada to serve their day and generation in a like manner. It may, therefore, be of interest at this time, as Strathcona Hall is approaching completion, to set forth the purposes for which it has been erected and to say something concerning the building itself and the part which it is intended to play in the life of the University.

Strathcona Hall is to be the home of the Young Men's Christian Association of McGill University, a society which has been in existence

at McGill and whose name has appeared in the McGill Calendar for the past twenty years, but which has recently come to occupy a much more prominent place in University life than formerly. It may be well to look for a moment, in this connection, at the history and aims of this Association, which is now to be so admirably housed here at McGill.

The Young Men's Christian Association was founded in England by George (afterwards Sir George) Williams, in the year 1844. It at once proved to be a great power for good, more especially to young men of the middle class in commercial life. While very successful there, however, it always laboured under the disability of having an undue infusion of the "unco guid", which gave to it a certain lack of manliness in the eyes of the general public. I presume it was some embryonic form of a pre-Christian Y. M. C. A. that the Preacher had in mind when he gave the advice, "Be not righteous over much: why shouldst thou destroy thyself?" However that may be, the Association when transplanted to America took on a more practical and sturdy aspect in the more rapid flow of life on this side of the water, and from America spread abroad over the face of the earth until it came to be represented in, literally, every civilized country on the globe. Now, in every city in America there are one or many Y. M. C. A. buildings which serve at once as club houses and places of relaxation and exercise, as well as centres of moral, religious, and social life, for tens of thousands of young men.

It is, however, in the universities of this continent that a new and most interesting phase of Association life has been developed; for in recent years there has been an immense accession of interest in this movement in all university circles. Great numbers of students have joined the Association; noble buildings have been erected in all the great centres of learning, while even in the smaller colleges everywhere, the Association has become an important influence in the student life. In the universities, furthermore, the Association, showing the vigour of its life in its power of adaptation, has developed an entirely different *facies* and type of work, the wider intellectual aspects of religion attracting much more attention and the narrowness of the movement elsewhere, disappearing. Gathering, as one often can, the *note* of a movement from the frequent use of certain phrases and words, one hears continually in the college associations the word "sane" employed — "sane religion," a "sane course of action"; the immoderate and grotesque phases of religious life are frowned upon, and the aim is made to set aside minor questions and details of belief and to bring rational religion to bear upon the great issues of everyday life. This aspect of religion appeals to educated men, and thus it comes about that now in our universities we find a very

large proportion of the best scholars and the most noted athletes members of the Y. M. C. A. This is strikingly the case at Yale, the strongest athletic centre in American collegiate life, but it is seen in every university, including our own.

This happy infusion of "sane" religion into everyday life is a movement well worthy of the active support which it receives in most great seats of learning on this continent, for it is this which gives our young men earnestness of purpose, balance and common sense. Furthermore, the cultivation of this attitude of mind or soul in a thousand young men attending a university is of much more moment to a community than its development in a thousand young men in other walks of life ; for these students will, on an average, in after life come to occupy more important positions and will be in a greater or lesser way the leaders in their respective circles, and will thus be in a position to exert a much greater influence than in the case of their less fortunate brothers.

And especially in the century on which we have just entered, when all things are in a state of rapid evolution, when great movements are going forward in the social, political and moral world, tending it is hard to say whither, the safety of the future lies largely in the hands of young men who are possessed not merely of ability but of a determination to use their abilities in the service of rectitude. By the cultivation of such a spirit alone can our country ever hope to attain that righteousness which "exalteth a nation." When we consider the political corruption and social carelessness on all sides, it must be acknowledged that we must look to our sons to improve upon the ways of their fathers, and no one will gainsay that anything which a university can do to assist the development of its young men along such lines must especially commend itself to the community at large, and is, in fact, one of the most valuable services which the university can render to the country.

Now it is precisely to the encouragement of such a mental and moral attitude that the work of the modern College Association is directed, and the Association holds that the foundation of this attitude of mind lies in the acceptance of the elements of the Christian religion.

The Young Men's Christian Association is, therefore, a religious organization, as the name implies. The members of the Association do not consider that this fact calls for any apology or extenuation, nor do they desire to offer any. A man may be very properly ashamed of holding mean and narrow religious views, but not of holding broad and generous ones, and this leads to another point in connection with the Association. Objections are sometimes raised to the Y. M. C. A. on the ground that it is narrow in its religious standards. Now, the Association is composed

of two classes of members,—Active Members and Associate Members. The qualifications of membership for an Associate Member are that he shall be a student or graduate and that he shall be a man of good character. The McGill Association for years has had among the Association members men of all sorts of religious beliefs, including not only all varieties of Protestants but also Roman Catholics and Jews. The Associate Members have every right and privilege in the Association except that of holding office and of voting for office-bearers. That is to say, the control of the Association does not lie with them although all its privileges do. The control of the Association is vested in its Active Members, who must add to the requirements of the Associate Members that of church membership. The constitution says that an Active Member must be a member of an “evangelical” church, but immediately proceeds to define what it means by “evangelical”, the definition showing that the term is used in the wide sense which it has in Germany and not in the narrow sense in which it is commonly used among us. As an illustration of this, it was found on submitting the definition in question to a clergyman who represents the most extreme wing of the high church party of the Church of England here in Montreal, the gentleman in question remarked that under the definition he was certainly an evangelical, as are all high churchman. In fact, every church which accepts the Bible as its rule of faith and the divinity of Christ as a teaching of the latter is “evangelical” according to the Y. M. C. A. definition.

It includes not only all parties in the Church of England, all Presbyterians, Methodists, Baptists, Congregationalists, Lutherans, etc., but a host of smaller sects all kinds and designations. Whether its membership would be extended to the Mormons, Holy Rollers and Doukhobors is a question ; although the latter would probably be admitted after a liberal application of sapolio and an undertaking to stay upon their farms and forego additional mid-winter pilgrimages.

The membership is not even limited to the Protestant churches, for all branches of the Eastern Church are equally included. If any Roman Catholic asserts that the Bible is his rule of faith, he also is eligible for Active Membership. The objection of narrowness is most frequently urged from the standpoint of the Unitarians, it being asserted that Unitarians are excluded from Active Membership in the Association. Such, however, is not the case. No mention is anywhere made in the Constitution or By-laws of the Association of the Unitarian or any other church. The acceptance on the part of the Association of the statement of St. Paul that in Christ “dwelleth all the fulness of the Godhead bodily” is the only point on which there is a possible conflict of opinion.

If any Unitarians cannot conscientiously become Active Members, no one regrets this more than the Association; for the Unitarian body have always insisted upon a high standard of conduct in the affairs of life, which is the main function of the Y. M. C. A. to cultivate. It is found necessary, however, in order to secure definiteness of action, to include in the Association those having a certain definiteness of belief. For the purpose of ascertaining just how far this is a living question at McGill, the University registration lists of students in the Faculties of Law, Arts and Applied Science, for the present year, were examined, and it was found that only five male students in these Faculties were Unitarians. The registration lists of the Medical Faculty, which are kept elsewhere in the University, were not examined, as there was no reason to suppose that the relative proportion of students of different religious denominations would in that Faculty differ from the average found in the Faculties mentioned above. If the ratio hold good there will be eight male students belonging to this denomination in the University. Rather less than one quarter of the students of McGill are Active Members of the Association, so that if this ratio of desire holds amongst Unitarian students, not more than two of them would ever have applied for Active Membership. There are, however, 970 male students in McGill College this year. It is evident from these figures that the asserted exclusion of Unitarians from the Active Membership of the Association cannot be said to be a grievance which has any practical existence with us here in McGill.

To sum up, therefore, the Association requires, in order to preserve its continuity, integrity and definiteness of action, that its Active Members shall have shown a sufficient interest in religious matters to have become members of some church. For while a student who is a church member is not necessarily a whit better than his fellow student who is not, the fact that he has joined a church shows that his aspirations, at any rate, lie in the direction to which the work of the Association tends. It would seem, therefore, that whatever may be said of the Association, it cannot be asserted that its religious requirements are narrow. They are certainly wider and more embracing than those of any of the great churches of the modern world. Indeed one rather striking fact in this connection is that among the men belonging to the Association no one cares, or in most cases even knows, to what church another belongs, which is a rather restful attitude of mind after the conflict of the churches themselves.

Another feature of this movement is its essentially lay character. The theological students hold aloof from the Association as a general rule,

their interest lying for the most part in a somewhat different direction. Its members are students in Arts, Medicine, Applied Science and Law. The membership in McGill is divided between these Faculties in about the proportion of their respective numbers. In fact every class of every Faculty in this University is represented in the membership of the Association. The membership in McGill for the present year is as follows :

	Active	Associate	Total
Arts. . . . .	84	20	104
Law . . . . .	2	0	2
Medicine. . . . .	66	54	120
Applied Science . . . . .	58	38	96
Theology . . . . .	38	0	38
Graduates. . . . .	14	2	16
	262	114	376

This total represents 39 per cent of the total number of men students in McGill College and shows that there is a much larger proportion of the students of the University belonging to the Y. M. C. A. than to any other university society. And this in a year when the Association is crowded into three or four stuffy rooms of almost microscopic dimensions in a side street, so that any consideration of social advantages is absolutely wanting. This fine spirit of moral earnestness so largely abroad among our men is one which the University would do well to recognize and to cultivate.

Strathcona Hall will be completed and ready for occupation during the coming summer. The opening of next session will see it in full activity. The Hall stands as has been mentioned on the site of the old Bute House, opposite to the main entrance of the University, which house and site was bought by the University Y. M. C. A. some ten years ago; the Association—until the present year, when the house was torn down—occupying one flat and renting the rest of the house as apartments. The Hall is five stories high, the upper three stories being laid out to afford residential accommodation for about sixty men. The rooms are for the most part single, and are of various sizes; while some of them are arranged in suites of two or three, comprising a sitting room with one or two bedrooms opening off from it. Each floor will be provided with baths, showers and other lavatory appliances of the most modern construction.

The two lower floors of the building are devoted to the general purposes of the Association. On passing into the main entrance on the

ground floor, a large well-lighted hall will be entered, opening out into spacious rooms on either side. Beyond this, will be the Secretary's office, cloak rooms, etc., and still further back, occupying the rear half of the flat, will be a large hall seating about three hundred and fifty persons, which will be used for general meetings of the whole Association, as well as for the Sunday afternoon services.

The first floor is laid out to accommodate what may be called the club life of the Association. A large reading room runs across the whole front of the building, with a fine view over the College campus. This room will be used for the regular reunions of the Association on Saturday night and for informal talks or lectures. A large game room opens off this, while the rear of the floor is occupied by five other rooms of various sizes, one of which will be used for library purposes and the others as studies or for meetings of the various clubs and classes. The rooms occupied by the Secretary of the Association will also be on this floor. In the basement there will be two fine bowling alleys as well as rooms which may be used for dining purposes. The building is Renaissance in style and will be of the best construction throughout, being carried on a steel frame, the walls and partitions being terra cotta, and the floors of birch or British Columbia fir. It will be thoroughly fireproof in every respect.

Strathcona Hall will thus serve as a home for the sixty men in residence there, resembling in many respects the residences of the older English universities, while it will be at the same time the meeting place of all the members of the Association and the centre for the Association's work.

The work of the University Association is of a somewhat varied character. Its services to an individual student are somewhat as follows: To every young man who intends coming to McGill and whose address can be ascertained by the Association, the Secretary of the Association writes in advance, offering to be of service to him in any possible way. Some twenty or thirty members of the Association return to Montreal each year, about a week before the session opens, and make preparations for the year's work. If the new student requests it, some member of the Association meets him at the train upon his arrival and assists him in securing a suitable boarding house, a list of which houses is always kept at the Y.M.C.A. office. Two or three weeks after the opening of the term, a reception is given to the freshman class of each Faculty, which receptions are always very largely attended. At these, the new men meet with the students of the higher years as well as with some of the teaching staff of the University, and are in this way afforded an opportunity of



making friends. The student has at all times, in the Secretary of the Association—himself always a McGill man—a friend whom he can consult in all difficulties and from whom assistance is always to be obtained. If he falls sick, whether he happens to belong to the Association or not, the Association sees that he is visited by some of his fellow students or by some of the ladies of the University who work in connection with the Association. If he falls into evil ways, he receives such help as one man can give another. There is an informal reunion of the members of the Association every Saturday night at the Association's rooms for an evening's relaxation after the week's work, which reunion is very largely attended and appreciated by men living in poor boarding-houses, whose surroundings leave much to be desired.

The more distinctly religious work of the Association consists: First, of a special service every Sunday afternoon at 3 o'clock, and, secondly, in the organization of a large number of classes for the study of the Bible, each of which meets at certain times during the week. The Sunday services which last for about an hour are regularly attended by a hundred or more students, while the number this winter has in several cases reached three hundred. Some of these meetings are addressed by certain of the city clergymen to whom the students are especially attached. Others of the speakers are gentlemen who are connected with some one of the various activities of the Association in some part of the world, or who are especially interested in the work of the Association. These are all men of broad culture and liberal views, being without exception university men, and many of them men who occupy the highest positions in the leading universities of the continent. These gentlemen receive no remuneration, each undertaking to address various university associations at certain dates throughout the academic year. Their gratuitous services on behalf of the young men of our universities is one of the most noteworthy features of the Association's work in America. These Sunday services, which, up to the present time, have been held in such halls as could from time to time be secured, will in future be conducted in the large hall on the ground floor of Strathcona Hall, which, as has been mentioned, is especially arranged for this purpose.

One of the most severe tests which can be applied to a movement, is that of seeing it as manifested in some great gathering or convention. Here, with the coming together of great numbers interested in the common cause, any tendency to run wild or deviate from the paths of common sense is almost certain to manifest itself somewhere. The University Young Men's Association has every summer, during the week following the close of the academic year, a series of gatherings or "conventions"

at various convenient points which are attended by students living in their respective districts. One of these to which the men of the great eastern universities go is held at Northfield, Massachusetts. Here, last summer, some eight hundred university men gathered, representing Harvard, Yale, Columbia, Cornell, Princeton, Brown, Williams and a number of other eastern universities. There was a contingent numbering about thirty men from McGill and they were the only Canadian students, with the exception of half a dozen from the Maritime Provinces who foregathered with their McGill compatriots. While possessing a rooted aversion to "conventions," the present writer was finally induced to accept a cordial and persistent invitation on the part of the McGill men at Northfield to go down and visit them, and a week end was spent there last summer during the time of the meeting. Going down prepared to hear the language of Canaan and to see a number of things with which he could hardly sympathize, he found nothing to which any exception could be taken or which could be characterized as other than admirable. His only regret was that a great number of McGill men could not be present. The whole proceedings were carried on with the most perfect decorum and in the most business-like manner. The grounds occupied were those of one of Mr. Moody's schools, the scholars being away on their vacation. These grounds are very spacious and beautiful and are well situated near the banks of the Connecticut River. On them stands a magnificent Assembly Hall, a Gymnasium and various other buildings used for the purposes of the School. The scholars during the term live in a number of separate houses in the vicinity of the grounds. Most of the colleges had secured one of these houses for purposes of residence. The McGill men, however, preferred to go into camp and consequently lived under canvas, their tents forming a very picturesque and striking feature on the grounds, distinguished from other similar groups by the Canadian ensign which floated from a flag staff near them.

As no hall of sufficient size to accommodate the whole body of students was available for purposes of dining, the students broke up into groups and dined in different halls on the grounds. That used by the McGill men accommodated about two hundred persons. Here the Harvard, Yale and Princeton contingents, together with the groups from some of the smaller universities of the east, also dined. The group of students from each university had its own tables reserved, the hall being gaily decorated by flags, each university having its own banner hanging from the wall above its respective position. The whole body of students met promptly for each meal, which, as the keen edge of hunger wore off, was enlivened by mutual greetings extended by one university to another

after the picturesque manner commonly adopted in student gatherings in the United States.

At the convention the daily round was as follows: Rising early, breakfast was disposed of and at 9 o'clock a series of conferences was held on subjects connected with Y. M. C. A. work. At 10 o'clock the men attended one or other of a number of courses of lectures on the Bible, one of which courses was given by Dr. Tory of McGill. At 11 o'clock there was a meeting of the whole body of students in the great hall which was addressed by some eminent speaker.

Wishing to ascertain whether somewhere there did not lurk something of the old fashioned obscurantist spirit of such meetings elsewhere, the writer elected to attend a 9 o'clock conference on "Personal Work", which seemed to promise the most important developments in this direction. It was, however, an excellent talk on the subject, by a cultivated young university man, the burden of his remarks being that in these matters example was much more effective than precept.

Dinner then followed sharp at noon, leaving a long afternoon which was devoted entirely to athletics of all sorts. Matches of all kinds, tennis, base ball, etc., were played between the various university contingents and were very interesting to watch, many of the most renowned athletes of the various universities being among the players. Incidentally it may be remarked that the writer's respect was immensely increased for anyone who could possibly hit a ball delivered by the pitcher of the Yale team. Many of the men who did not engage in the more vigorous forms of athletics played golf; others rowed on the river or explored the very interesting and beautiful country about Northfield in long walks.

After supper two other general meetings were held, one at 7 p.m. and the other at 8 p.m., at which excellent addresses were given, chiefly by men from the leading universities, leaving the remainder of the evenings free. No one could but be impressed by the fine, well set up and manly appearance of the men, their evident earnestness and the excellent organization of the whole programme and the promptitude with which everything was carried out. A peculiarly pleasing appearance is given to all the gatherings by the fact that it is the Northfield usage for the men to discard the ordinary dress of conventional life and to appear always in flannels, except on Sunday, when all appear dressed in a manner appropriate to the day. Any one looking at that great assemblage of the very flower of the young manhood of America could not but feel with the Honourable H. B. F. MacFarland, Chairman of the Board of Commissioners for the District of Columbia, who being at Northfield on other

business was invited to speak at one of the meetings, when he said that what he had seen at Northfield had so impressed him that he could easily believe that in times of serious national peril, the steadying influence of such a body of young men as he saw at Northfield and who year by year were trained up by the university Associations and passed thence into the various higher walks of life, might easily be the determining factor which exerted at a critical moment might save the nation.

The admirable breadth of feeling among the men was very striking and manifested itself in various ways. One of these was in the use of the British flag everywhere. In the decoration of the halls hundreds of flags were employed, and wherever the Stars and Stripes appeared, a Union Jack or Red Ensign accompanied it. The two flags, everywhere joined, were the chief element of the decorations in all the buildings and over the main hall there floated, side by side, the flags of the two nations. Thus was McGill's influence exerted in the cause of international amity. To anyone who is familiar with the ordinary usage in the great Republic to the south of us, the intertwining of the British flag with that of the United States must appear as a remarkable incident, for at receptions, banquets, etc, there, when hundreds of flags are employed in decoration, among which can be recognized that of every tuppenny-ha'penny nation under heaven, the British flag is always conspicuous by its absence. If the influence of Northfield is a steadying one in national life, it is also one which tends strongly toward the closer union of the Anglo-Saxon peoples and through them of the peoples of the world. For among those attending the convention were representatives from many different and distant lands. The Japanese, Chinese and Hindoos were of course easily recognized, but there were also representatives from many other countries. Among these were several young Boers from the Transvaal. These, who were fine manly young fellows, until lately our enemies, were now British subjects, and, in talking with one of them one evening, the conversation naturally drifted to the subject of the war. It was very interesting to learn his view on many questions concerning the war, in which both of us had taken so keen an interest but had viewed from such diverse standpoints. In his opinion his people would have come out of the conflict in a manner quite satisfactory to themselves had it not been for the advent of the Colonial troops, whose method of fighting being identical with their own prevented them from carrying out plans which would eventually have brought them success.

One of the features of the student life at Northfield which is most striking is the admirable bearing of the men. Although engaged in athletic games throughout the whole afternoon of every day, there was

not the slightest sign of wrangling, roughness, or of the unsportsmanlike conduct that so often detracts from the pleasure of our sports. Everywhere there was the underlying spirit of politeness and consideration for others. One began to wonder whether we had not here that "School of Manners" to which reference has recently been made. Certainly everyone practised manners, whether we accept the term in its ancient meaning, as employed by William of Wykeham, or in its common acceptance in these degenerate days in which we live. In fact the only occasion on which anything which could be termed an altercation was heard at Northfield was at the hotel. It was a somewhat heated controversy between the hotel clerk and a coloured porter. Being such a rare psychological phenomenon it seemed worthy of closer investigation, but on walking by the disputants, ostensibly on other business, it was found that the question at issue was the best method of remembering the names and succession of the Minor Prophets.

Under the influence of the University Associations, there has been a most remarkable movement during the past few years toward the systematic study of the Bible among the students in all the great seats of learning as well as in the smaller colleges of the continent. That the Association has been able to bring this about, certainly shows the influence which it exerts. The following figures show the growth of this movement :

Year	No. of Institutions	Students enrolled in Classes for Bible Study
1890.. . . . .	97	2,000
1895.. . . . .	189	6,131
1899.. . . . .	237	10,439
1900.. . . . .	331	11,782
1901.. . . . .	320	10,871
1902.. . . . .	361	12,219
1903.. . . . .	423	15,990
1904.. . . . .	529	25,260

It is estimated that during the present year there are about 37,000 students following these courses.

One of the most eminent graduates of this University, Dr. William Osler, who, after having been called to the highest position in his profession in the neighbouring Republic, has just accepted the foremost chair of medicine in Great Britain, in a recent lecture on Immortality delivered at Harvard University on the Ingersoll Foundation, spoke as follows :

"To keep his mind sweet, the modern scientific man should be satur-

ated with the Bible and Plato, with Homer, Shakespeare and Milton. To see life through their eyes may enable him to strike a balance between the rational and the emotional which is the most serious difficulty of the intellectual life."

Now McGill is a seat of learning where science is especially cultivated. Nearly three-quarters of its men are engaged exclusively in the study of science, and the most strenuous endeavours of the University are directed to developing our students into "modern scientific men." There are, however, only thirty students in the University that ever see the inside of a volume of Plato or Homer, while those who are "saturated with Shakespeare and Milton" can certainly be numbered without the aid of the calculus. In many colleges the study of Holy Scripture forms some part, however subordinate, of the curriculum. In our great professional faculties at McGill this is of course impossible. It is nevertheless unfortunate, for, whatever views may be held concerning the precise character of the inspiration which the Bible claims for itself, there can be no doubt that it presents the most noble rule of conduct and offers the most inspiring guide in life which is to be found anywhere. The McGill Association, therefore, exerts its utmost endeavour to secure a systematic study of the Bible on the part of as many of our students as possible. The method employed is to organize small groups of men in the different years who undertake to devote a certain amount of time each day to the study of certain portions of the Bible and who meet once a week for a discussion of the same under the leadership of some senior student.

In these classes full cognizance is taken of the results of modern criticism and of the most recent advances in our knowledge of Biblical subjects. An exact knowledge of the means of transportation secured by Jonah on his visit to Nineveh is not considered to be of such prime importance as the realization of the lessons which his preaching was intended to convey. The poetry of the book of Jashur, while duly admired, is felt perhaps not to have the same bearing on present day problems as the teaching of the Gospels. The questions of the Higher Criticism do not in fact seriously disturb the men. The McGill Association this year has under its auspices 205 men, or over one-fifth of all the male students of the University, engaged in systematic Bible study as above outlined.

One result of the recent development of the Y. M. C. A. movement in the universities has been the desire which has arisen to send out men to carry forward Y. M. C. A. work in other and less favoured lands, and so, yearly, numbers of men in the various universities offer themselves for this service. Some become ordained and go out as missionaries under the auspices of various churches, but many remain as laymen to go out

to the great university centres in India or to the great centres of population in China and there work along Y. M. C. A. lines among the students and young men of these distant lands. Last year six men went out from McGill to India and China, all of them members of the Association, three of them being laymen, to take up positions in the Y. M. C. A. organizations in India and China. In fact this work in other parts of the Empire and in foreign lands forms a bond of connection of ever increasing importance between the young men of the east and west, and is a work which, as we have recently seen, displays itself in the most unlooked for places, even in the advanced lines of the Japanese army in Manchuria, where the work of the Association has so commended itself to the generals of the Japanese army that at their special request no less than sixteen Y. M. C. A. stations have been established there, of which fourteen are in charge of Japanese secretaries.

In the best interests of future generations all must desire that this zeal and earnestness for righteousness among our young men should continue. If our old men often dream dreams, we are at least glad that our young men see visions, and that notwithstanding antiseptic applications the leaven works and will work and spread "till the whole be leavened."

Such then in its main outlines is the work which will, henceforth, find its centre of influence at Strathcona Hall. Like the University itself, its work will be that of Education—for, in the words of Plato, "We are not speaking of education in the narrower sense, but of that other education in virtue from youth upwards which makes a man eagerly pursue the ideal perfection of citizenship, and teaches him how rightly to rule and how to obey. This is the only education which, upon our view, deserves the name; that other sort of training, which aims at the acquisition of wealth or bodily strength, or mere cleverness apart from intelligence and justice, is mean and illiberal, and is not worthy to be called education at all. But let us not quarrel with one another about a word, provided that the proposition which has just been granted hold good; to wit, that those who are rightly educated generally become good men. Neither must we cast a slight upon education, which is the first and fairest thing that the best of men can ever have, and which, though liable to take a wrong direction, is capable of reformation. And this work of reformation is the great business of every man while he lives."

FRANK DAWSON ADAMS.

## THE TURNING OF THE THUMB.

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Many have had the good fortune to see Gérôme's famous picture, "The Gladiators." Very many more are familiar with it by means only of photographs or engravings. But few of the hundreds of thousands who have seen either the original or the copy have stopped to consider the archæological accuracy of the artist's composition, or to question his interpretation of a sign followed at one time with such momentous result to the Roman gladiator. Artistic license in producing effect would be, and is, no doubt, a just excuse for the French painter's error, if error it be; and that it is an error appears to be the view of the author of *The Art Gallery of the Centennial Exhibition in The Art Treasures of America*, a work that has, perhaps, done more than any other, unless it be *The Boys' Own Annual*, to familiarize the multitude with the picture itself.

It is not denied, and never has been denied, that the artist's intention was to give the death signal. The title of the picture proves this.<sup>1</sup> But whether or not his interpretation is the death signal is a vexed question. The contest is between a mirmillo and a retiarius—the former so called because he has the image of a fish (mormyr) as the crest of his helmet; the latter so called because, in addition to his trident (tridens), he fights with a net (rete), with which he seeks to entangle his adversary. The retiarius was lost. He is vanquished. His cry is "Submitto!" Yet his outstretched arm with upturned thumb is a demand for his own death, a highly improbable request; that is, if it be classically correct to say that the upturned thumb was the signal to kill. The artist is at least consistent. If the gesture of the Vestals is right, then that of the retiarius is right. But is it right? "That is the question," as Hamlet says.

In Dr. Smith's *Dictionary of Antiquities* we find that, "when a gladiator was wounded, the people called out 'habet' or 'hoc habet'; and the one who was vanquished lowered his arms in token of submission." Now this is not the gesture of the retiarius in Gérôme's painting, though the signal he there gives is that of submission beyond a

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<sup>1</sup> *Ave, Cæsar, morituri te salutant.*



doubt. Then from the podium comes the signal to kill. The Vestals ignore the appeal for mercy, and press down their thumbs, and yet Dr. Smith (p. 198) states that, "his fate depended upon the people, who pressed down their thumbs if they wished him to be saved, but turned them up if they wished him to be killed, and ordered him to receive the sword (*ferrum recipere*), which gladiators usually did with the greatest firmness." These views are supported by the Rev. Canon Farrar in his intensely interesting historical tale, *Darkness and Dawn*, or *Scenes in the Days of Nero*:

"Which of us will win?" I asked Glanydon, with a sad smile.

"You," said the Phrygian, "you are stronger than I am and taller."

"Yes, but you are quicker and more active, and you can't tell how I hate that net of yours. I know you will catch me in it."

"If I do, you will still have fought so well that *the people will all turn down their thumbs, and you will be spared.*" Later in the story, when the combat is over, the author expresses the same view (p. 60): "The Samnites were victorious, and the net-throwers were all wounded and dropped their arms, except Onesimus. They knelt with their forefingers uplifted, and, as they had fought with courage, and had been hardly used, handkerchiefs began to be waved in their favour, and thumbs to be turned *downwards.*" A third reference of similar tenor follows (p. 61): "Filled with pity, they turned their thumbs *downwards* in sign that the combat should be stopped and the lives of the defeated *spared* . . . . Never had they seen a more astonishing or gallant feat. The retiarius—and he a mere tyro—had, single-handed, defeated four Samnites in succession. The thing was unheard of. Every thumb was *turned up* for Onesimus to give the finishing stroke to his conquered enemy."

The opinion held by Canon Farrar that turning the thumbs down was a signal of mercy is often entertained, and it is not surprising to find a reviewer advancing it by way of correction. In a notice of *Paul, A Tragedy of Glamour*,<sup>1</sup> the author is taken to task. "We notice," writes his critic, "two classical errors in the early part of the play, which an author who dates his preface from Oxford ought to have avoided. The line,

"The down-turned thumb tells that my doom must be,"

embodies a common error, as the *down-turned thumb* was the signal for *sparing* a gladiator's life, not for *condemnation*. An Oxford man should

<sup>1</sup> *The Illustrated Review*, vol. 3, p. 695.

remember his Juvenal—'et verso pollice vulgi Quemlibet occidunt populariter.'" Nor is this the only instance of the kind that has come to my notice.

In one of Mr. Richard Dowling's novels the author turned down the thumb as the sign of death; and *The Athenæum* (1861) reproved him for his mistake. Whereupon, Mr. Edmund Yates in *The World* of January 25th, 1882, came to the rescue of Mr. Dowling, and expressed a fear from this reproof that his own long and early faith in the meaning of "pollice verso" was tottering.

The view we are discussing is expressed twice by the author of *The Gladiators*. "Occasionally," writes Mr. Whyte-Melville, "some vanquished champion of more than common beauty, or who had displayed more than ordinary address and courage, so wins the favour of the spectators that they sign for his life to be spared. Hands are turned outwards with the *thumb pointing to the earth*, and the victor sheathes his sword, and retires with his wounded antagonist from the contest; but more generally the fallen man's signal for mercy is neglected. Ere the shout of "A Hit" has died upon his ears, his despairing eye marks *the thumbs* of his judges *pointing upwards*, and he disposes himself to 'welcome the steel' with a calm courage worthy of a better cause."<sup>1</sup>

The second reference is equally pointed: "Then, with a numerous party of friends and clients, Licinius made a strong demonstration of mercy; the speed of foot, too, displayed by the vanquished, and the obvious cause of his discomforture, acted favourably on the majority of spectators. Such an array of *hands* turned outwards, and *pointing to the earth*, met the eye of Placidus, the Tribune, that he could not but forsake his cruel purpose. So he gave his weapon to one of the attendants who had now entered the arena, took his cloak from the hands of another, and, with a graceful bow to the spectators, turned scornfully from his fallen foe."<sup>2</sup>

In all probability, the differences of opinion arise from the use of the verb "vertere" by so many ancient writers in connection with the movement of the thumb: Thus, from Juvenal (Sat. III, v. 36), "Munera nunc edunt, et verso pollice vulgi, Quemlibet occidunt populariter," "And to win popularity, they slay whomsoever the people, by turning (up) the thumb, order." For giving to the word "verso" the "up" turning of the thumb, Facciolati and Forcellini may be cited.<sup>3</sup> Then

<sup>1</sup> *The Gladiators, a Tale of Rome and Judea*, by G. J. Whyte-Melville, p. 139, chapter 19, "The Arena."

<sup>2</sup> *Ibid.*, p. 147, chapter 15.

<sup>3</sup> "Totius Latinitatis Lexicon, consilio et cura Jacobi Facciolati, opera et studio Ogidii Forcellini."

Pliny (1, 28, c. 2), to describe a different direction of the thumb, uses the verb "premere" thus:—"Pollices, cum faveamus, premere, etiam proverbio jubemur," (*Whenever we favour, we are ordered even by the proverb to press (down) the thumb*). From Statius, *Theb.* v. 26, we find that to "Infestus pollex" is given the meaning to turn and lift up: "Infestus pollex est conversus, et subrectus, quia talis esse aversantium solet, et damnantium." (*Because such is wont to be the mark of opposition and of condemnation.*)

Prudentius, a poet of the fourth century, describes the conduct of a virgin at one of these gladiatorial contests in a passage which may be translated as follows: "And, as often as the victor thrusts the sword into the throat, the modest virgin says it is her delight, and orders the breast of the vanquished to be pierced, by turning up her thumb."<sup>1</sup> So far as I have been able to ascertain, this perhaps is the most original and authentic interpretation of the words "pollice verso," and of the gesture which the words imply. It will be seen that the poet was describing a gladiatorial scene, and was giving the sign to smite, not only as he himself understood it, but, perhaps, as he himself had seen it; for, though the contests were prohibited by Constantine, A.D. 325, they were not finally abolished until the reign of Theodoric II. in A.D. 500. In the *Epodes* of Horace, a passage occurs in which the poet speaks of the thumb being used to indicate flattery: "The flatterer will praise your sports (pursuits) with both his thumbs."<sup>2</sup>

By reference to Facciollati and Forcellini it will be found that these quotations are given to prove that the upturning of the thumb was the signal to kill, and the authors themselves say: "In the thumb was an intimation of favour and affection, for those favouring turned it down (*premebant*), those opposing and disapproving turned it back again and lifted it up."<sup>3</sup> One of the best known and most widely used Latin dictionaries—the familiar "Andrews"—refers to the subject in the same way, under the heading "pollex:—" "To close down the thumb (*premere*) was a sign of approbation; to extend it (*vertere, convertere, pollex infestus*) was a sign of condemnation."

To those who hold the opinion that the depressed thumb indicated a desire to spare the vanquished gladiator must be added the name of Professor Huxley. In *The Century*, for February, 1888, in comparing the animal world to a gladiator's show, he writes: "The spectator has

<sup>1</sup> "et quoties victor ferrum jugulo inserit, illa delicias ait esse suas, pectusque jacentis virgo modesta jubet converso pollice rumpi." (l. 3. cont. Symmach, v. 1097.)

<sup>2</sup> "Fautor utroque tuum laudabit pollice ludum" (l. Ep. 18, v. 66).

<sup>3</sup> "In pollice erat favoris studiique significatio, nam faventes premebant, aversantes improbantque vertebant retro, et subrigebant."

no need to turn his thumbs down, as no quarter is given." The well-known Canadian author and classical scholar, Mr. George Murray, to whom I am deeply indebted for information on this most interesting subject, suggests that, "if some ignorant people object to Huxley's being quoted on a classical question, we have proof that he was perfectly acquainted with the terms of the Roman arena. In an essay published in *The Reader*, of May 20th, 1865, and afterwards in his *Lay Sermons*, etc., page 21, the following is to be found: "Let us have sweet girl graduates by all means. They will be none the less sweet for a little wisdom; and the golden hair will not curl less gracefully outside the head by reason of there being brains within. Nay, if obvious practical difficulties can be overcome, let those women who feel inclined to do so descend into the gladiatorial arena of life, not merely in the guise of 'retiariæ' as heretofore, but as bold 'sicariæ' breasting the open fray."

In speaking of Mr. George Murray, I am reminded that one of his friends at Oxford, the distinguished Oriental scholar, Sir Edwin Arnold, favoured the opinion with which this portion of my article more especially deals—the opinion that "thumbs down" signified mercy. Before passing to the contrary view, some additional references may be given to show how varied and extensive is the literature in which the depressed thumb is taken to be a sign of clemency. It comprehends not merely the works of popular writers, but also those of recognized scholars. In his *Roman Antiquities*, John Lankre writes as follows (p. 177): "Lookers-on had a strange way of expressing the approbation or disapprobation of the manner in which the gladiator fought. If they thought favourably of a man who lowered his arms in token of submission, they raised their hands and pressed their thumbs downwards, and by this means saved his life; but, if they were unfavourable, they turned up their thumbs, and by this sign ordered his antagonist to slay him." The same view is held by Robert Hunter, A.M., F.G.S., and Professor Charles Morris in the new Revised Encyclopædic Dictionary (1898) and it can, I think, be sustained by a quotation from Guhl & Koner's *Life of the Greeks and Romans* (p. 562): "In case the spectators lifted their clinched fists (verso pollice) the fight had to be continued; the waving of handkerchiefs was the sign of mercy granted." Among scholars of high repute who should be placed in the same list must be included Professor Mayor, with whom, I may add, Professor Glover, of Cambridge, a recent occupant of a classical chair in Queen's University, Kingston, agrees. Professor Mayor's opinion is clearly stated in the following words: "Those who wished the death of a conquered gladiator turned

(vertebant, convertebant) their thumbs towards their breasts as a signal to his opponent to stab him. Those who wished him to be spared, turned their thumbs downwards (premebant) as a signal for dropping the sword." In Ruperti's edition of Juvenal there is a suggestion supporting Professor Mayor's opinion, namely, that the thumb was pointed upwards and inwards to the heart as a sign that the fallen man was to be run through there, and in accordance with this suggestion, the Rev. A. J. Maclean, one of the editors of the *Bibliotheca Classica*, holds to the opinion that the people expressed their approbation by turning their thumbs down, and the reverse by uplifting them.

Before concluding this portion of my article with a few comments on the turning of the thumb towards the breast to signify that the conquered gladiator was to be killed, an appropriate quotation from a little volume entitled *Society in Rome under the Cæsars* may be given.<sup>1</sup> According to the author: "The general practice was for the spectators to express their wishes as to the fate of the prostrate combatant by a motion of the thumb, which was turned to the breast to indicate the death thrust, or moved downwards to signify the dropping of the weapon." And he adds, on the authority of Tacitus, that these mute gestures were often accompanied by loud shouts, "dissono clamore."

The act itself of turning the thumb towards the breast is suggestive. It made self-evident what was meant, if it could be seen; and we can take it for granted, if the signal was to be promptly obeyed, that it was one which had to be easily seen and readily understood. The great height from the arena to the podium would possibly render such a signal indistinct. It certainly would be indistinct if, at the moment of defeat, the successful gladiator happened to be across the arena or at one end of it, to the right or left of the podium, in a colosseum large enough to hold, perhaps, eighty or a hundred thousand human beings. Nor was it safe, when in doubt about the sign, to rely upon the cry of the spectators. Indeed, on such occasions, the eye was a safer guide than the ear, for the savage shouts<sup>2</sup> of the assembled thousands were meant not alone for the combatants, but by way of censure of some hated minister, or even of the not less hated sovereign. Here alone, by the license of the circus, the populace could freely express themselves, and in this way, and by this means, it is said,<sup>3</sup> they compelled Tiberius to restore a statue which he had taken to his own palace from the Baths of Agrippa. This

<sup>1</sup> *Society in Rome under the Cæsars*, by William Ralph Inge, M.A., Fellow of King's College, Cambridge, and Assistant Master at Eton (p. 57).

<sup>2</sup> *Habet! Accipe ferrum! Occide, ure, verbera! Quare tam timide incurrit in ferrum? Quare parum libenter moritur?* Sen. Ep. 7. 4.

<sup>3</sup> Plin. H. N. 34. 62.

license was the opportunity of the Roman people. Their outcries led more than once to the fall of powerful leaders, for in proportion as freedom of speech was denied at all other times, so was it the more effective when pronounced on these occasions of political liberty. Rival leaders organized beforehand rival bands; and rival shouts, each trying to drown the other, produced on these occasions a veritable pandemonium. Hence it would be dangerous, indeed, for the gladiator to depend for any indication of the sign upon the opposing cries of the intensely excited spectators. Yet, there are many who hold to the view that the signal to kill was the turning of the thumb inwards towards the breast. Mr. Edward Strachan, author of *The Art Gallery of the Centennial Exhibition*, tells us that most people believe that the gesture of condemnation in the circus was made by turning in the thumb towards the breast. But, however inaccurate Gérôme may be in his illustration, no demonstration however clear would have induced him to admit in his painting the accuracy of this sign of condemnation. Such would have deprived the picture of all artistic effect, had he adopted it. Looking at the picture then, all one could see would be the outer part of the clinched hand. The thumb itself would be completely hidden from view, no matter what might be the real sign to kill in the time of Nero. For the artist to turn the thumb towards the heart in the picture would have hidden the thumb and made the picture meaningless.

On the other hand, the list of writers asserting that death was signified by turning the thumb down and not up, is a formidable one, including, as it does, novelists, poets, and scholars of high standing. The quotations I have selected from their works are just as pointed as those that precede, while, at the same time, their varied character may of itself prove interesting to the general reader. Naturally the work of fiction that occurs first of all to the mind of novel readers is *Quo Vadis? A Narrative of the Time of Nero*, in which the customs of the arena are referred to several times. The three quotations given illustrate the author's view. We find at page 62, chapter 7, that Vestinius says: "Thou art mistaken! I hold with Cæsar." "Very well," answered Petronius, "I have just maintained that thou hast a glimmering of understanding, but Cæsar insists that thou art an ass without mixture." "Habet," said Cæsar, laughing and turning down the thumb as was done in the Circus, in sign that the gladiator had received a blow and was to be finished."

The second quotation brings before us a divided circus (p. 428, chapter 45): "The whole circus was trembling from plaudits and the roar of the people. For those who had bet on Calendio, he was at that moment greater than Cæsar; but for this very reason all animosity

against the Gaul vanished from their hearts. At the cost of his blood, he had filled their purses. The voices of the public were divided. On the upper seats, half the signs were for death and half for mercy; but the retiarius looked only at the box of Cæsar and the Vestals, waiting for what they would decide. To the misfortune of the fallen gladiator, Nero did not like him, for at the last games before the fire he had bet against the Gaul, and had lost considerable sums to Licinus; hence he thrust his hand out of the podium, and turned his thumb towards the earth. The Vestals supported the sign at once. Calendio knelt on the breast of the Gaul, drew a short knife from his belt, pushed apart the armour around the neck of his opponent, and drove the three-edged blade into his throat to the handle."

The third quotation shows the wavering Emperor finally deciding for mercy (p. 501, chapter 65): "Then the enthusiasm of the multitude passed everything seen in the circus before. The crowd stamped and howled. Voices for mercy grew simply terrible . . . but Cæsar halted and hesitated . . . self-love would not let him yield to the wish of the multitude, and still he did not dare to oppose it through his inborn cowardice. So he gazed around to see if among the Augustians he could not find *fingers turned down in sign of death*. But Petronius *held up his hand*, and looked almost challengingly in Nero's face. Vestinius, superstitious, but inclined to enthusiasm, gave a sign for mercy also. So did Scevinus, the Senator, and many others . . . Nero understood that to oppose longer was simply dangerous . . . He looked once more at Subrius Flavius; at Scevinus, the Centurion, a relative of the Senator; at the soldiers; and, seeing everywhere frowning brows, moved faces, and eyes fixed on him, *he gave the sign for mercy.*"

Although the opinion of the popular novelist cannot, in many cases, be regarded as authoritative, still, in a comprehensive survey, the inclusion of novelists who write for the young, and are widely read by them, may not be without point. In *Beric, the Briton; a Story of the Roman Invasion*, by Henty, is to be found the following (p. 218): "Were you a gladiator once, asked Beric? Certainly, I was, answered Scopus, and so were all the Masters of the Schools . . . I was ten years in the arena and fought thirty-five battles. In thirty I was victorious, in the other five I was defeated; but, as I was a favourite, and always made a good fight, *the thumbs were turned up*, which, as you know, *is the signal for mercy.*"

And again, at page 263, we read: "So tremendous was the blow that Lupus fell an inert mass upon the ground . . . Scopus

leaned over the fallen man. He was insensible, but breathed, being simply stunned by the weight of the blow. Scopus held up his own hand, and the *unanimous up-turning of the thumbs showed that the spectators were well satisfied with the skill and courage with which Lupus had fought.*"

Again, at page 105 of *A Book of Golden Deeds*, by Charlotte M. Yonge, is to be found the following: "The Romans were not apt to have mercy on the fallen. Fights of all sorts took place—the light armed soldier and the netsman—the lasso and the javelin—the two heavy-armed warriors—all combinations of single combat, and sometimes a general *mêlée*. When a gladiator wounded his adversary, he shouted to the spectators, "hoc habet"—"he has it," and looked up to know whether he would kill or spare. *If the people held up their thumbs, the conquered was left to recover if he could. If they turned them down, he was left to die*; and if he showed any reluctance to present his throat for the death-blow, there was a scornful shout "reripe ferrum"—"receive the steel."

It will be noticed by readers that the few last authors quoted are not of the same opinion as the writer of the present article. "Who shall decide when doctors disagree?"

The Earl of Southesk in a piece of verse called *The Anchorite*, in which the rhymes are dubious and the situation less classical than melodramatic, writes:

"His searching glances fall on me,  
He marks my anxious agony.  
'Ha! Ha! Be it thine to speak,' saith he,  
'To save or slay. Doom! haste the doom!  
The upward or the downward thumb?'"

That graceful poet Lord Houghton, in his *Fall of Alipius*, gives us the same view:

"Sat then Alipius silent there alone  
With fast shut eyes, and spirit far away.  
Remained he there as stone upon the stone,  
While the flushed conqueror asked the sign to slay  
The stricken victim, who despairing, dumb,  
Waited the sentence of the downward thumb."

It is surprising that sculpture has given so little assistance to either side of the argument. We know that, as to the Olympic Games, it was almost a universal thing to erect statues to the victors, and even to per-



petuate the memory of great horses by monuments. With the Roman artist, too, a favorite subject was the gladiatorial combats. The Capitoline Museum, and the Museum of the Louvre, each furnishes us with statues of gladiators. The tomb of Scaurus is decorated with bas-reliefs moulded in stucco. On the frieze are written the names of gladiators, their owners, and their victories. Woodcuts, from these bas-reliefs, show a combatant asking for mercy with the up-lifted arm and index finger, as in Gérôme's great picture. But, so far as I have been able to learn, there is absolutely nothing in this way to indicate the significance of the signs in question. I have been told that there is, or was, in the Museum at Naples, a terra-cotta relief alleged to be of the sign of mercy (*missio*). The thumb was turned and held in the palm of the hand, and concealed by the four fingers. But that alone, without some authoritative explanation (and there is none), proves nothing, except to suggest that "*premere*" may have had another meaning than "to press downwards." The same uncertainty exists in regard to discoveries at Pompeii of hands modelled in clay. While the gesture can be seen, there is nothing left to tell us what the gesture means.

The distinctively different tastes of the Greeks and Romans in regard to public shows may possibly account for the existence of statuary evidence in the one case, and its absence in the other. In Rome, the games appealed to the passions; in Greece, to the refined side of man's nature. In Rome, a combat was tame and uninteresting without the abundant sacrifice of human blood. Murder was a welcome and grateful spectacle, and the people took a savage delight in seeing old men and infants, women and girls, torn to pieces by wild beasts. Not so with the Greeks, to whom this butchery was unknown. When, from the rivalry between Athens and Corinth, it was sought to introduce the Roman games into the former City, Demonax, the cynic, cried out his protest: "First throw down the altar erected above a thousand years ago, by our ancestors, to mercy." Mercy was the rule, never the exception, in the Grecian games, and Cicero recognizes this when he says: "To conquer at Olympia was almost, in the estimation of the Grecians, more great and glorious than to receive the honour of a triumph at Rome." But while Cicero conceded the cruelty and inhumanity of the Circus, he excused its practices when guilty men were compelled to fight. "Two aqueducts were scarce sufficient to wash off the human blood, which a few hours sport shed in these imperial shambles . . . and, when glutted with bloodshed, ladies sat down in the wet and steaming arena to luxurious suppers." The desire for novelty drove the people to every form of barbarous excess.

No variety of atrocity, however inhuman, failed of favourable appreciation. The insatiable craving for blood only whetted the appetite. Of Galerius it was said, "he never supped without human blood." Seneca denounced these games. Plutarch condemned them. Petronius and Junius Mauricus opposed them. Marcus Aurelius tried to render them harmless, and other pagans doubtless protested. Still the games and their influence were the mainspring of Roman life and frequently formed the subject of conversation. Children in their amusements had their contests after the manner of the arena; and the noblest women of the Empire were known to crave the embraces of the successful gladiator. Apart from their fascination, the people wanted them as the one opportunity for expressing public opinion; and Cæsar continued them because in the excitement of the games the people would forget about politics.

In wrestling or boxing, in the Pancratium or the Pentathlum; in the throwing of the quoit; in the foot-race, horse-race, and chariot-race, with the Greek there always existed a spirit of moderation, mercy, and humanity. These spectacles were things of delight. Their repeated solemnization tended to elevate and make men gentle and humane. The Roman shows sought to make men brave, but tended to degrade. The one was a pleasure to recall, the other a delight to forget. Sorrow, enmity, revenge were the remorseful after-effects of the gladiatorial combat. Delight, friendship, harmony kept fresh and green the spirited incidents of the Olympic feasts. This may be the reason, perhaps, that in Rome the people were not sorry to forget as quickly as possible, and cared little to preserve anything designed to make them remember. It is known that for a period of nearly seven centuries, down to the burning of Rome in 1084, statuary in marble received little or no attention. Bronze was the material. Of the thousands of such statues few escaped demolition. Christianity and Paganism both shared in the wholesale system of devastation. On the plea that pagan error should no longer bear evidence, Gratianus, by imperial decree, ordered the general destruction of artistic treasures; and the violent resentment of Christians against the pagan aristocracy, for years of cruelty, in turn caused the latter for sake of revenge to aid and abet mob-craze for wanton spoliation.

And so, antique monuments failing us, we are thrown back to a condition of perennial doubt on this, perhaps trivial, but ever-recurring question. We have seen how contradictory are the views of those who have introduced the gesture as a picturesque detail in their verses and stories. When we turn to writers of greater authority in such matters, we again find variance.

In *The Canadian Spectator* of February 19th, 1881, "Laclede" in his "Ephemerides," while paying a high but just compliment to Mr. George Murray's scholarship, combats his views on this vexed question. He says: "With all possible deference, I venture to enquire where there is a single classical passage showing that "vertere" is used to indicate an upward direction. The verses of Juvenal and Prudentius cannot be cited, as they are precisely the ones that we wish to elucidate. Is there not reason to say that the two signals given by the Vestal Virgins in the Amphitheatre were, first, "premere pollicem," doubling the fingers round the thumb to signify grace; second, "vertere pollicem," turning down the thumb of the right hand to signify death?"

It would be difficult indeed to find such a passage, and it is this that occasions the great confusion of opinion. But taking "vertere" as found in Juvenal (III. v. 36), and "premere" as found in Pliny (I. 28, c. 2), can there be much doubt that, as "premere" indicates to press down, so "vertere" indicates to turn up? But the answer to "Laclede" had better come from the Rev. Joseph C. Carrier, C.S.C., Librarian and Curator of the Museum, College of St. Laurent, near Montreal — an authority on the subject. In a letter dated May 12th, 1888, addressed to *The Montreal Star*, approving of Mr. George Murray's views upon the subject, he writes as follows:—"It is quite true as I contend that "vertere" means to turn up or down, as the case may be, whether in English, French, or Italian. But "vertere" taken in connection with "premere" can mean only to turn up, as "premere" signifies press down or upon, to depress. Now, it is well known that the ancient Romans who frequented the amphitheatres had a way of showing their favour or their disfavour towards the gladiators by a peculiar motion of their right hand thumb, *i.e.* pollice verso or pollice presso, as, *e.g.*, we read in Pliny. They expressed their favour towards the defeated combatant by pressing the thumb on the index (premere pollicem), and their disfavour, by lifting up the same thumb towards their own breast (vertere pollicem); and when the sword of the victor had executed the mimicry of the uplifted thumbs, the blood-thirsty multitude expressed their satisfaction by shouting "hoc habet," which may be translated by the single interjection "there!" In French, "il en tient," "he's got it."

*Chambers' Encyclopædia* holds with "Laclede." In the article on gladiators we find the following: "When one of the combatants was disarmed or on the ground, the victor looked to the Emperor, if present, or to the people for the signal of death. If they raised their thumbs, his life was spared; if they turned them down, he executed the fatal mandate."

Again, Sir John Cam Hobhouse, in his note on Gladiators, to illustrate Canto IV of *Childe Harold's Pilgrimage*, writes: "When one gladiator wounded another, he shouted "hoc habet" or "habet," "He has it." The wounded combatant dropped his weapon, and, advancing to the edge of the arena, supplicated the spectators. If he had fought well, the people saved him; if otherwise, or as they happened to be inclined, they turned down their thumbs, and he was slain."

In Ramsay's *Manual of Roman Antiquities*, the author supports this view. He states at page 179: "As soon as a gladiator inflicted a decided wound on his adversary, he exclaimed "Hoc habet." If the injury disabled his opponent, the spectators replied "Habet." The wounded man now *held up his finger* in token of submission. The President, as a matter of courtesy referred to the audience, and, if the man was a favourite and had fought well, the crowd testified their approbation, and he was allowed to retire. But if not, they depressed their thumbs in silence, and the conqueror in obedience to a look from the President, plunged his weapon into the body of the unresisting victim."

Next, we find written by Wilkins, in his *Manual of Roman Antiquities* (p. 105): "When a gladiator was disarmed or wounded, his fate was in the hands of the spectators. If he had fought well and bravely, they signified by applause and by waving of handkerchiefs their wish that he should be spared: but if they were in a cruel mood, or if he had failed to please them, they pointed downwards with their thumbs in silence, and he received the finishing blow." In the translation of Seyffert's *Dictionary of Antiquities* (s.v. "Gladiatores") we find the following: "The sign of mercy (*missio*) was the waving of handkerchiefs: the clenched fist and downward thumb indicated that the combat was to be fought till death."

In Bostock's Translation of the *Natural History* of Pliny the passage, "*Pollices cum faveamus premere etiam proverbio jubemur,*" appears to have received the following explanation: The thumb was turned upwards as a mark of favour, downwards as a mark of disfavour.

Professor Dale, of McMaster University, in the course of correspondence, suggests that, if the verb "premere" is taken to mean "squeeze—hold tight," then "vertere" will mean "extend—stretch out," in a hostile or threatening manner; and this, he says, appears to be the sense of "infestus" in the following passage from Burmann: *Sperat et in salva victus gladiator harena, Sit licet infesto pollice turba minax.* (III. 82, 87.) "And the conquered gladiator, on the cruel sand, has hope, although the crowd threatens with hostile thumb."

But if we are dependent only upon the word *vertere* the question never can be settled, for *vertere* may be used to signify as many different gestures as there are points to the compass. It is the juxta-position of the two words *vertere* and *premere* that lends force to the contention that *pollice verso* was to turn up, (to kill), and *pollice presso*, to press down, (to save). If it be not so, then my own long and early faith is tottering too, like that of Mr. Yates, whose opinion is the opposite to my own. If then, *pollice verso* was to turn up, (to kill), then the title given by G erome to his great picture is a misnomer, and the gesture of the Vestals is inaccurate.

Those authorities are wise who take refuge in a "blameless silence," on this vexing subject. Dr. Goldwin Smith writes that it is, in his opinion, unlikely that the question can ever be settled, unless something more specific can be found in the classics, and Professor Pike, of Queen's, also discreetly declares: "Pending more light, *non liquet*."

JOHN A. BARRON.

## EVENING STAR.

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*(From the Swedish.)*

The storm wind slumbers, the waves are still;  
O'er the land the murky night is streaming.  
Lone as a lighthouse on its hill,  
High in the void a star is gleaming.

Through the dark night-world of the ocean waters,  
Above the cold waves' solemn dances,  
The star, on her course through heaven, scatters  
In nameless splendour her shining lances.

See how her flaming sword has riven  
The heaving waves' dark depths asunder!  
'Is't a winged Seraph that fares through heaven?'  
Bemused in the dreaming night I wonder.

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## THOU DEWY ROSE.

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*(From the Danish of J. P. Jacobsen.)*

Thou dewy rose! Thou dewy rose!  
Whisper what dreams are thine.  
Is there in them the same sweet air,  
The same unearthly glamour there  
There is in mine?  
And does it whisper and moan and sigh  
Through fainting odours and fading sky,  
Through wakening song  
Soft chords among?  
In longing, in longing I live,  
Thou dewy rose! Thou dewy rose!  
Whisper what dreams are thine.

## AMANTIUM IRAE.

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One bright spring evening Jan Coggings was working in his garden, stopping now and then to enjoy his pipe at leisure, as he leant on his spade, and affectionately surveyed his well-cultivated "splat." He was thus engaged, thinking with satisfaction of the amount of space he had devoted to "tetties," when Jim Peagam slouched up to the gate, and resting his arms on it regarded Jan and his trim beds with a gloomy gaze. He was not smoking according to custom, although his empty pipe was stuck in his mouth; his hat was pulled over one eye, and he wore altogether a very dejected dismal air.

"Aw, 'tis you is it, Jim?" said Jan, falling to work with his spade again. "I zem'd I yeared zumbody scufflin' long t'other zide th' 'aidge."

"Ees, 'tis mezel right 'nuff," returned Jim.

"I zem you be lukin' tur'ble glum," Jan remarked, as he tenderly patted the earth that covered a row of his favourite peas.

Jim jerked his hat still further over his eye, but made no answer.

"I niver han't zeed ee luke s'black, I han't," continued Jan, straightening himself and resting on his spade to get a better view of Jim's face.

"Is the paig bad agen?"

"No," rejoined Jim without enthusiasm, "paig's right 'nuff—mos' vat."

"Ort the matter wi' yer chullern er yer dumman then?" asked Jan.

Jim looked blacker than ever and growled an inaudible reply.

"Thort when I fust zeed ee," Jan resumed, "mert ha'bin yer dumman 'ad a zot ee up, on'y you be lukin' s'tur'ble dree-corndered, I zem'd agen must be zumthing er nuther 'ad a kimmed across the paig."

"Wull," broke out Jim at last, "dang me if tid'n 'nuff fer make a fullah luke like the daavil hizzel fer t' hev t' do wi' dummen; they'm veefy times wuss'n paigs. Me an' my ole dumman hev a vaaled out 'ammer an' tongs, thats 'ot us hev a dew'd. Us niver han't 'ad jis a row aw't avore, an' us hev a 'ad zum purty lively skeer-ups."

"'Ot did ee vaal out 'bout?" asked Jan, with a judicial air.

"Wull, 'twad'n nort much fer begin wi'," Jim replied, "'twas like this yer, don't ee zee. Er was comin' out'n back 'ouze wi' a joog o'mulk jis as I banged awpe the door. A vlyed up agin er, 'at the annel off the joog, and skat the mulk right awver th' ole dumman, ivry drap aw't. 'Twas a purty scummer I can tull ee, but her loked s'square, I could'n help gurzlin' a bit fer zee 'er. Er zot up mos' tur'ble tho', an' caaled me ivrything her eude lay her tongue tew."

"That vetchd up your monkey a bit tew, I reckon," said Jan.

"Wull, I did cuss a bit," Jim admitted, "I can't zay I didn', fer I didn' zee 'twas my fawt no more'n 'ers. 'Twas what you mert caal a misfortin'. Tho', er zed er wadn' gwaine t'be swear'd tew by no man livin', an' aynded the joog t'me. 'Take that there,' zes er, 'an' luke where you be gwaine nex' time, wull ee.' I dodged the joog an' a went smash agin th'waall. Thet ther zot my monkey up—there was a brish-tail lyin' 'andy, so I ketchd'n up an'drawd'n tew er (fer I zem'd er daysarved a skat 'n ayde), but er whipped out-zide in a jiffey, an' banged the door vas,' an' the brish-tail rattled up agin 'n. 'Git yer zupper yerzel', er screeched, an' the chullern zot up yowlin' wan acress t'other. 'I bain't gwaine fer bide yer fer hev me ayde 'at off,' zes er, 'I be gwaine t'me mawther's.' 'Git 'long wi' ee then', zes I, 'an' a gude riddance.' I bide where I was a bit, fer I didn' spose her'd raally go, an' I zem'd us 'd 'ad 'nuff o' drawin' things about. I payped out t'las', an' I zeed her was act'lly go, an' 'ad a tuked the chullern wi' er. There was the tay-kittle bilin' dry, an' the vire gwaine out under the brandis. I began'd fer winder wuther her'd come back er no, an' I zem'd I'd a been purty vas' drawin' brush-tail t' th'ayde o' her, but when my dumman is a zot up, I niver han't year'd the fullah o'er fer romancin' an' caallin' names."

"You niver han't 'ad okeeshun fer yer nobody ulse t'jis 'vantage," said Jan sagely, "but lor bless ee, er'll be better now er've a 'ad er skat an' vling a bit. Dew'th 'em gude wance in a while fer let vly, on'y a body'th bes' way be keerful an' keep's ayde out o' the way o' the sass-pans an s'ich—jis times."

"Wuther er's better er wuss won't be no difference to me, I reckon," said Jim, "for er's erved away, clayne go—an' 'ot's more, I don't b'layve er'll come back. Us niver han't 'ad jis a vflare-up avore."

"Don't you make tew sure o' thet, Jim Paygam, Lor bless ee, er'll come back saf' enough arter er've a culed down a bit, zee if er don't!"

"Er han't had no zupper," Jim remarked reflectively.

"Nor you nuther I s'pose," queried Jan.

<sup>1</sup> Such.



‘No, an’ I be veelin tur’ble leery,<sup>1</sup> I can tull ee.”

“Tur’ble bad veelin’ that there,” said Jan with sympathetic shake of his head, “an’ I’d ax ee fer bide an’ kitch a bit yer—me an’ Betsy ev a ait ours a gudish bit ago, but th’ole dumman’d vry again vas’ ’nuff. Er id’n’ nowadays awver er labour, Betsy idn’. But I be zemin’ yer missis’ll picky ’long ’ome vaster if er zeeth smawke comin’ out th’ouze chimby an’ smull’t<sup>h</sup> the vryin’ gwaine on. ’Er idn’ erved<sup>2</sup> very far, bless ee—go t’hide close ’ome t’ouze zumwheres mos’ likelis, an’ when er zeeth there’s zumbody stowerin’ up wi’ the vire vryin’ an’ thet, er’ll come back if on’y fer make zure they baint burnin’ th’ouze down an’ aitin’ up all the mayte. My advice t’you Jeemes is t’go back an’ draw een a gude vire, zit the brandis an’ vryin’ pan down ’pon tap it an’ vry the zupper yerzel.”

Jim hitched himself to a fresh position and scratched his head slowly as he turned over this piece of advice.

“I should ha’ thort,” he said presently, “that ’er’d a come back zoonder if I bide out th’way.”

“I would zay; dummen baint all made ’like wan t’other no more’n tettiies nor tarmits be, but I vound thikky way answer wonnerful wull wi’ Betsy wance.”

Jim took his empty pipe from his mouth, and jerked his hat back from his eyes in amazement.

“You don’t go fer zay that Betsy’ve iver erved away?” he almost gasped.

Jan chuckled. “Aw ees er did though wance—er was limber ’nuff an’ cude ern vas’ ’nuff, days gone by. You wouldn’t think fer zee er now though er’ve a vaalled abroad termenjus since they times. ’Twas like this yer, don’t ee zee,” he continued, lowering his voice confidentially and moving nearer the garden gate, “me an’ Betsy us ’ed a ’ad wan tur’ble baig row times gone by.”

“Hain’t ee ’ad no more’n wan?” asked Jim with a mixture of disappointment and scepticism in his tones.

“Of kewse us ev; ’ad scores o’ little smit-smats; there idn’ ’ar’ly a day goeth by but us hev a bit of a skat t’wan t’other, as mert zay, zumtime er nuther. Lor bless ee, that’s nort,—don’t innerfere wi’ our mayte nor slaype—but us han’t ad jis a baig wan as I be spyaking o’ more’n wance that I can caal t’mind.”

“Zo you vaaled out purty loud did ee?”

“Us did, an’ no mistake. ’Twas a gudish time ago, ighteen or twenty year I reckon—us had a bin morried a longish time tew—(us was

<sup>1</sup> Empty.

<sup>2</sup> Run.

## AMANTIUM IRAE

heetched up young, me an' Betsy)—fer mos' all the chullern was up out the way. Us 'ad on'y got Tommy wi' us, an' he wadn' s'tur'ble baig. 'Twas like this yer—us was a zot t'breakshis wan morning—Betsy was airly body—er used fer git up an'vry a fust-rate breakshis, an' ait'n wi' me tew, by half past vive avore I went t'work. (Betsy niver wadn' wan o' these yer dummen wot'll let their men vooks go off t'work pon a passel o' cold stuff, because they be tew lazy fer git out o' baid). Wull us was a zot aitin' the breakshis an' tellin' bout the paigs an' thet, an' pertickler about a tur'ble vine sparky paig us 'ad a got wance—us niver han't 'ad wan like'n zince—us bort'n of a dayler—a wadn' the brayde us mos' times rears yer 'bouts, an' a was jis a vine paig that us raymimbered 'n, don't ee zee, tho' a died a dozen year I reckon avore the time I be spaykin' o'. Us wus tullin' an' tullin' bout'n, an' Betsy er zed a was taked baad t'Macklemas, an' I stickt tew't 'twas Kersmas; er zed t'wadn' an' I zed 'twas, an' t'these day I'd zwear tew't 'twas Kersmas if I was een a kewrt o' jistice."

"If you be tullin' bout thicky sparky paig," said the voice of Betsy, as her round face and wide form appeared in the cottage doorway, "a was tuke baad more'n thirty year ago come Macklemas. I mind it fer I taked up a gewze t'maister's missus thicky same day, an' when I come back the paig was most dead wi' staggers."

"An' I min' 'twas Kersmas," persisted Jan, "cause I'd ait a zite o' viggypudd'n an' I wadn' s' tur'ble wull mezel."

"Git out Jan," Betsy retorted, "thicky wadn't the sparky paig. The paig you be tullin' 'o was wan maister zulled us chaype, an' a was tur'ble slow t'vattenin'. Thet was t'Kersmas you an' paig was bad t'wance, an' ole Varmer Perry come voor an' gied ee both a dose o' ile o' veetriol,—didn' seem fer hev much 'fect 'pon you, an' the paig ee died—I min' it s'wull's can be—But 'twas t'Macklemas the sparky paig was a taked."

"Kersmas," said Jan.

"Macklemas," reiterated Betsy.

"Luke yer, ole dumman, us shall come t'drawin' things t'wan t'other agin d'reckly if us contradicks like this yer. D'ye min' how us vaaled out an' vaaled een agin about thik paig?"

"Ees, ees, I min' it, but t'these day I stan'tew't 'twas Macklemas." "Wull. I'll stick t'Kersmas an' you t'Macklemas, zo us both gits our own way, an' if iver I mayte the ghostes o' thik sparky paig I'll ax'n when a was tuke baad an' died, I wull. Reckon ee'll knaw fer sartain."

"Git 'long wi' ee Jan, 'tis 'aythenish fer tull like that there," remonstrated Betsy.

"Ot a kick up us did ev t'be zure," chuckled Jan, as if the remembrance of the dispute gave him great amusement, "us was younger an' more viery tho', an' you'd a got a mos' daytarmined taymper when you was a zot up, ole dumman."

"An' you can't zay nort, Jan Coggings, you was a like the daayil conjured when you was tuked raal mad."

"Wull," Jan went on, "I zed t'wadn' 'an you zed 'twas, an' you zed t'wad'n an' I zed 'twas, an' tho' you up an' caalled me a leard."

"An' you zed I was another," said Betsy.

"I reckon I did," Jan admitted quite cheerfully. "I mind us caalled wan t'other all the leards an' vules an' dump-aydes us cude lay our tongues tew wan across t'other."

"I min' 'ow you zwear," said Betsy, "I niver han't yeared ee zwear s'bad avore nor zince."

"An' tho'," Jan went on as if enjoying each detail of the quarrel, "you drawed th' taypot t'me, an' I aynded the burd loave tew ee, an' the cheel zot up jis a scritch'n I thort all the porish'd be there d'reckly. D'ye mind 'ow a scritch'd, Betsy?"

"I should think I dew, poor little eart aw'n!"

"'E thort us was keelin' wan t'other, I s'pose," resumed Jan, "but nuther wan o' us wadn' 'at, fur I dodged the taypot, an' th'ole dumman whipped out the way o' the burd loave—a went vlyin' into the vire, an' the cat erved up the chumbly. Betsy 'er tuked no more notice o' the loave than if a'd bin a tette; er ketched up the cheel an' er stalked out th'ouze. "I bain't comin' back," zes er. "Bide away then," zes I, an' off I goes t'work. I min' thikky day us was 'awin' 'tarmits up'n Clover Down. I didn' objeck tew a bit o' tarmit 'awin' in they days—me back wadn' s'steeff tho', an' 'twas purty work 'nuff jis keep scraalin' long. Joey Yarren was 'awin tew—tur'ble lively chap a was they times—(Lor', a's s'deeve's a pawst now, an' s'tisicked up wi' the browntitis you can' 'ardly yer'n spayke)—I mind s'wull 's can be 'ow a used fer zing,

Zome delights in zawin'  
An' zome delights in mawin',  
But of all the jobs that I likes best,  
Gie I some tarmit 'awin'.

An zo say I, if you be young 'nuff not fer get the back nor belly-ache. But thikky day t'wadn' tew me mind, tho' I'd a got a nice bit o' baccy tew. Cudn' make out wot was the matter wi'me till I begannd fer zom 'twas the skeer-up I'd a 'ad wi' the ole dumman in the mornin'. I niver shouldn' ha' thort a skat er tew 'd a made a body veel s'oncomferable."

## AMANTIUM IRAE

"'Twas yer conshunz, I reckon," called out Betsy from the kitchen where she was now bumping vigorously at her ironing, and joining in the conversation when she felt moved to do so.

"Ot's thicky?" enquired Jan, "I zem I han't got no jis thing."  
 "You'd soon know if you was fer go t'church oftener'n you dew. 'Tis what mak'th ee veel oncomferable if you dew what you should ha' layved alone, zo Pazz'n zeth."

Jan took a deep whiff from his pipe and remarked, "Then I reckon I'll bide away, fer I'd zoonder veel comferable. But come t'thet, ole dumman, there wadn' jis a tur'ble difference between us, you ayned the taypot if I drewed the burd loave, an' come t' caallin' leards an' thet. I reckon 'twas bout zix o' wan an' half-dizen o' t'other—on'y that you managed fer git een more t'wance than I did, you tulled s'much vaster."

Betsy made no response but bumped her iron more energetically than before.

"'Ow 'bout when you come back arter work?" asked Jim, who was beginning to feel a sympathetic interest in Jan's story.

"'Ow 'bout it? Why th'ouze was 'zackly's us 'ad left'n—there was the taypot 'at t'bits lying 'pon the vloor, wi' the tay-layves an' tay all skat about. The vire was go out, an' th'loave thet I'd a drewed into th'ashes was a burned s'black's a nigger. I loked 'bout th'ouze; no Betsy, no cheel, no nort, but the cat a zot blinkin' avore th'vireplace. 'Wull,' thinks I, 'er 've a erved away fer zure then.' I went outzide th'ouze an' loked round—cud'n zee nort but th'paigs thet was a come gurntin' up 'ome t'ouze door, they was thet 'ungered. The geeze an' chicken an' thet was squawkin' mos' tur'ble tew. 'Peared they 'adn' 'ad nort t'ait zince th'morning. Thinks I t'mezel, 'This yer's a purty jakes aw't,' an' I beganed fer think tho' thet I should 'ed fer git another dumman for come an' mind th'ouze an' things."

"'Twadn' s'gude's you did," cried Betsy from the kitchen window.

"Thort that would wake ee up," chuckled Jan, "you'd a come back vas' 'nuff then, ole dumman, I reckon. Wull, 'twadn' no use fer bide there gappin," he continued, "zo fust I stapped the mouths o' the' paigs an' things wi' all the waste stuff I cude vind. Then I got a brish an' swayed the tay-layves, taypot, an' all the scummer o't right outzide th'door. Tho' I got een a vaggot 'ewde,<sup>1</sup> made a termenjus vire an' 'etched up tay-kittle. I zot lukin' tew'n smawkin' me pipe a bit, an' tho' I veeled tur'ble ungered an' leery as mert zay, zo I vetched out the bacon an' tetties, stickt the brandis 'pon th'vire, skat the vryin'pan down

<sup>1</sup> Wood.

pon tap'n, an' beginned fer vry me supper. I was mos' termenjus 'ot, fer I'd a got een vire 'nuff fer roast a bullick, zo I bide back in th'middle o' th'ouze an' drawed the baacon into the vryin'pan, an' the cat erved about wi's tail up s'if a thort 'twas wonnerful exziting. I was jus 'bout vryed mezel, I can tull ee, an' d'reckly mos' the danged vryin'pan ketched avire, zo I erved out door wi'n an' zot'n down an' vetched the fillises<sup>1</sup> an' blaved tew'n till th'vire went out. Tho' I drawed the baacon pon tap a deesh, an' skat the tetties into the pan. Thikky was mos' avire wi' yeat, zo I chopped the tetties where a was fixed down 'pon the garden alley. I car'd'n een an' zot'n 'pon tap the brandis fer brownie the tetties up a bit, but the pan on'y ketched vire agin. Mos' bust mezel wi' blawin' tew'n, but I put'n out t'last, an' tho,' get the tetties out aw'n I cudn' wi'out lettin' em vaall into the vire, zo I stickt the vryin'pan 'pon the table, like us used fer dew by me mawther's time, an' I ait 'em out th'pan. They was tur'ble gude, I niver han't ait better vry tetties. The baacon was a bit black like, but I'd a got a drap o'zider left in me virkin, zo I washed it down wi' thet there. I was jis beginning fer veel purty comferable when I yeared zumbody comin' up t'door, an' dreckly mos' een waalked Betsy an' the cheel. 'Er loked t'the vire an' 'er loked tew the vryin'pan 'pon the table. I didn' spayke, but went on aitin'. "What 'pon aa'th 'ev ee been doin', Jan Coggings?" zes 'er t'l'las'. "Vryin'," zes I. "Wull, I wonder you han't zot the plaace avire," zes 'er. "I zeed th'sparks an' smawke comin' out o' th' chumbly all up'n Girt Down. Thort I should vind th'ouze a burned t'ground, I did." "Wull, a idn'," zes I, "er I should'n be zittin' in en, aitin' me zupper, an' 'tis tur'ble gude tew." Er didn' spayke for a minute an' the cheel come voor an' I gie'd'n zum tetties 'pon tap me knife.

"You han't got no tay, ev ee?" zes er dreckly mos'.

"There idn' no taypot," zes I, "but zider'll dew wull 'nuff," an' I drinked out me virkin' 's I spawked. Betsy er didn' zay nort, but er went t'dresser an' tuked down er best chaney taypot—er would'n niver 'ev thikky used by er mind—an' er made me s'gude a deesh o' tay as iver I drinked. "Wull ee 'ev a vew tetties?" zes I, "reckon the baacon's a bit burned." "I bain't pertickler," zes er, "an' er ait s'if er was too 'ungered fer be. Zo did the cheel. A scraaled up tap me knee, an a ait mos' 'alf o' what I'd a got 'pon tap me plaate. I'd a vryed up a tur'ble zite o' baacon an' tetties, but us an' th' cat ait the lot. Betsy er loked wance er twice t'the vryin'pan zot 'pon table, but er didn' zay nort. Reckon er was tew glad fer ait what was in en fer quarrly wi' where er

<sup>1</sup> Bellows.

voun'en. Er let out arterwards that er on'y come back t' th' ouze wance fer zumthing fer th'cheel, an' a bit o' burd an' butter fer herzel. Us didn' spayke while us was s'busy aitin', an' arter us 'ad a dew'd Betsy clayned up, an' I zot smawkin' me pipe 's if us niver 'ad'n a drawed things t'wan t'others aydes, nur caalled wan t'other leards nur fules nur nort. The vurry cat zot up blinkin' t' the vire lookin' s'wull playseed as Punch, s'if 'ad got a mind fer zay nort about it all. An' thet was th'end o' thikky skeer-up.

"You zune made up t'wan t'other agen then," remarked Jim.

Jan nodded as he took a few whiffs from his pipe, and being in the full tide of reminiscence, he continued, "Tew er dree days arter I was thinkin aw't all awver an' I zem'd I'd gie th'ole dumman a trayte. 'Er adn' niver zeed th'zay, an' 'er was often zeming 'er'd like fer zee't. Axed o'maister if a'd lend me a 'oss an' keart. A zed us mert 'ev en t'wance, an' gie'd m' 'alf a day in t'the bargain,—wonnerful gude maister always was 'bout jis thing. Zo us tuked the cheel, an' zum mayte an' drink, an' us drayved out t' Porlock Weir fer zee th'zay."

"'Ow much aw't did us zee though?" asked Betsy from her window.

"Nort," was Jan's emphatic rejoinder. "'Twas a vineish morning when us zit voor, but by time us got t'Porlock a little meesty rain was a come on. You cude 'ardly zee a yard bevore ee, 'twas that meesty. I'm danged if I cude zee any zay. Betsy 'er luked an' 'er cudn' zee no zay, an' th'cheel 'e luked an' 'e cudn' zee no zay,—tur'ble put 'bout a was tew nat fer zee't—mos' cryin' a was—'twadn' no gude—us all luked, but there wadn' no zay t'be zeed."

"Reckon you got t'th'wrong place," suggested Jim.

Jan shook his head. "'Twas where us was tulled fer go, but 'twas these yer little meesty rain, don't ee zee? The zay was there right 'nuff I s'pose, on'y us cudn' zee't. Anyway us zem'd us 'ad a drayved th'oss var 'nuff, zo I onheetched en an' gied'n a voot o'wets,<sup>1</sup> an' us zot down, an' 'ad our own mayte, an' tho' us turned tail an' come 'ome again. 'Aw 'twas a vine jaunt now if us didn't zee th'zay," and Jan fell t'smacking the earth with his spade again.

"Wull," said Jim rousing himself gloomily, "reckon I'd bes' was be pickin' 'long back an' zee if th'ouze 'ev a erved away."

"Aw, you'll vind yer missus there I axpec'," remarked Jan consolingly.

Jim looked as if that prospect was not the most comforting that he could imagine. "An if I dew," he said with doleful certainty, "'t'wull

<sup>1</sup> Oats.

be nort but jaw. I'd zoonder 'ev a skat 'n ayde an' 'ev done wi't. Barn the dummens' tongues, I zay."

Jan ceased patting the smooth beds, refilled his pipe, lit it and smoked a few seconds before he replied. "You mind me o'zum pottery I larned when I was a young chap, yearin' me ole uncle Nat raypayt it. 'E was a ole boy, a was; niver adn' got a missus—wouldn' 'ev nort fer dew wi' the dummen, zo a zed. Used fer live by 'izzel a did, an' dew fer 'izzel. Lor, I've a zeed'n clayning up's ouze, an' kewkin' a's bit o' mayte many's the time. Quare, dry ole chap a was, always ready—they did zay a made up the pottery but thet I can't zwear tew. When vooks axed'n why a didn' git morried a'd sheek a's 'ayde an' zay,

'Vrom rocks an' zands an' zalt zay waater  
Ordain fer zit me vree,  
Vrom girt baig guns an' dummens' clatter  
Gude Lord dayliver me.'"

"I zes amen t' thet," was Jim's feeling rejoinder, as he pulled his hat down on his ears, and moved slowly off in the direction of his cottage.

"Purty 'ulpless craytures you men vook'ud be wi'out the dummen, Jan Coggings, tho' you dew tull s'much about the clatter aw'm," said Betsy coming out with her sunbonnet on a few moments later. "I be gwaine up'n Girt Down fer look fer th' geeze. Jis zee th'ouze don't ern away, wull ee?" On her return she reported that there was smoke issuing from Jim Peagam's cottage chimney, and gave it as her opinion that Ann had already returned.

"Where there's smawke there's vire, an' where there's vire there's mos' likelis vryin'," said Jan, "zo us'll awpe they'm aitin' their zupper comfer'ble by these time. 'Er've a come round purty quick tho' I zem."

"An' 'tidn' 's if 'er 'd erned away in the mornin', 'er can't bide out by night, an' there's a baby in arms, don't ee zee."

"I zee," responded Jan, as he resumed his work with a reflective air.

LYDIA JUTSUM TAYLOR.

## SOME REMINISCENCES OF FREE TRADE.

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A few reminiscences of the times when the Anti-Corn Law League was founded may prove interesting to the readers of *The McGill University Magazine*.

A revival of a cry in England in favour of protection, under the specious name of fair-trade, has attracted some attention and has led to an increased activity on the part of the Cobden Club, which has lately been distributing a considerable quantity of free-trade literature with the view of educating the present generation to a fuller knowledge of the old struggle for the repeal of the Corn Laws. The agitation for free-trade from its very inception took the shape of an anti-corn law, or as it was called an anti-bread tax movement. England must always be a corn importing country. In the days of the League it was computed that it was necessary for a wheat-growing area as large as one of her counties (Norfolk) to be added every year to her producing power in order to feed the growth in population. All that was needed therefore was a bad harvest or two to present the question to the people in the shape of empty cupboards. Thus it is easy to be seen that free trade and anti-corn law agitation soon become convertible terms. The first name of the organization was the Anti-Corn Law Association, and the League retained the same name and objects until the final victory. The whole programme of the League was the total, immediate and unconditional repeal of the Corn Laws and from this it never swerved. Mr. W. J. Fox tersely put it at a meeting: "We demand the total, immediate and unconditional repeal of the Corn-Laws; we ask no more, and we will take no less from Sir Robert Peel on the one side, or Lord John Russell on the other, or my Lord Brougham on all sides."

The political neutrality of the League, too, was as distinctly declared by Cobden in the House of Commons as in public meetings, "I do not call myself Whig or Tory, he said; "I am a Free Trader and opposed to monopoly wherever I find it." Accordingly as a simple free-trader,



he would support either the Whigs or Sir Robert Peel, whichever of them should go furthest in repealing the restrictions on food.

Cobden impressed me as being one of the most sagacious men I have ever met. The natural refinement and modesty of his mind was visible in his countenance and in his whole deportment. He had the happy art of attracting people about him and of so making them his personal friends by the interest he took in them and by the certainty with which he inspired them that his best advice was always at their service. Affecting no superiority, he claimed no deference. The extraordinary versatility of Cobden and his capacity for adapting his style and the tone of his arguments to the circumstances and prejudices of his auditors whoever they might be—from M.P.'s down to the most violent of Chartists—was one of his most remarkable traits. His expositions of the fallacies of his opponents were above all lucid. At first the protectionists made an oratorical stand against him. They brought out their best speakers with elaborately prepared speeches. The resolutions proposed by them in public meetings were carefully considered and couched in terms as dexterous as they could devise. But all this preparation and skill were of little avail against Cobden's keen logic and aphoristic phrase. He assured the farmers, for instance, that they were the agricultural interest, and that the landowner was no more an agriculturist than a shipowner was a sailor. The protectionist promises he called a rope of sand; the land, the farmer's raw material. He led men by his superior moral force as well as by his more extensive and accurate knowledge, and at the same time his fine tact made him tolerant of mental slowness in others. In one of his speeches he was interrupted by the stupid assertion that scarcity could not produce dearness—a piece of sarcasm which he met, not with contempt, but with this rejoinder—"Repeal, then, need not be feared because by my opponent's own showing, abundance cannot produce cheapness." To an adversary who admitted that the doctrine of free-trade was true in the abstract, he put the question whether he had ever heard of a father teaching his children to obey the ten commandments—in the abstract.

Cobden threatened the House of Commons, on their refusing him a committee of inquiry, that he would hold a meeting in every county town in England and Wales during the recess; a threat which he put into execution. He held his meetings on the market-days, and proposed a resolution condemnatory of the corn laws which he carried in every county save one, the unfortunate Huntingdon, on which his retort to the member, Mr. Baring, is well known: "I am not surprised, for there is

not a school-boy in the land who does not know that Huntingdon is the last place in England where an old woman was burnt for witchcraft."

The weekly meetings of the League held in Covent Garden Theatre produced an immense sensation. They form a signal epoch in the memory of every Londoner old enough to have been present at them. To one listener, at the first meeting, the feeling was, first of all, one of disappointment. Mr. Cobden had spoken better elsewhere. But when the jealous admirer turned to the thronged audience, he saw no reflection of his own sense of something wanting. There was no excitement, but there was a quiet, listening *silence*, eloquent of faith in the speaker. It was in this faith of his hearers that Mr. Cobden had his strength. While he set little value upon oratorical ornament, he sometimes startled his hearers by sudden outbursts of eloquence, an instance of which we find in the close of his reply to a certain speech of Lord Stanley. "Englishmen," said he, "have a respect for rank, perhaps too much; they feel an attachment to the laws of their country; but there is another attribute in the minds of Englishmen—there is a permanent veneration for sacred things; and where their sympathy and respect and deference are enlisted in what they believe to be a sacred cause, you and yours" (with sudden fire, addressing the Tory benches) "will vanish like chaff before a whirlwind."

It was remarked that he was not treated in the House of Commons with the courtesy usually accorded to a new member, but it was also perceived that he did not need such observance—he could do without it.

The Life of Cobden by John Morley is, on the whole a worthy tribute to the memory of a great and good man, but the unprejudiced view of Mr. Morley is not shared, even yet, by the landlord class who were opposed to Cobden. Over against the embittered writings of antagonistic journalists one must put some of the epigrams popular at the time, and still good enough to keep in the memory. Some of these concern not only Cobden but John Bright, a totally different type of man, who, however, worked in perfect harmony with him. Here are some of the jingles of which I have spoken:

Cobden our man of men,  
Doing the work of ten,  
Each worth a score!  
Bright in the lion's den,  
Bearding them now and then,  
Worth fifty more!

When Bright was returned for the cathedral city of Durham in 1843, an epigram appeared which was modelled on one of an earlier century. The old verse celebrated the return of one Dr. Goodenough to the House of Commons, and ran thus:—

'Tis well enough that Goodenough  
Should to the Commons preach,  
For sure enough they're bad enough  
For Goodenough to teach.

The new version read:—

'Tis meet enough and fit enough  
The House should be enlightened,  
For sure enough they're dull enough,  
And wanting to be *Bright-ened*.

John Bright's oratory has been so often the subject of praise that it can hardly need further eulogy now. It can scarcely be questioned that he was the most perfect master of Saxon English who ever spoke in the House of Commons. Another extraordinary orator of the old agitation was William Johnson Fox. I shall give only one illustration of the trenchant style, which joined with an impassioned utterance, made his speeches irresistible. To one of the many who objected that free-trade was unwise because England ought to be "independent of foreigners," Mr. Fox replied as follows: "It is a favourite theme, this independence of foreigners. One would imagine that the patriotism of the landlord's breast must be most intense. Yet he seems to forget that he is employing guano to manure his fields—that he is spreading a layer of foreign surface over his English soil, through which every atom of corn is to grow, becoming polluted thereby with the dependence upon foreigners which he professes to abjure. . . . To what is he left, this disclaimer against foreigners and advocate of dependence upon home? Trace him through his career. This was very admirably done by an honourable gentleman recently. His opponent urged this plea, and he stripped him, as it were, from head to foot, showing that he had not an article of dress upon him which did not render him in some degree dependent upon foreigners. . . . We will pursue this subject, and trace his whole life. Why, a French cook dresses his dinner for him, and a Swiss valet dresses him for his dinner. He hands down his lady, decked with pearls which never grew in the shell of a British oyster; and

her waving plume of ostrich feathers never formed the tail of a British barn-door fowl. The viands of his table are from all the countries of the world; his wines are from the banks of the Rhine and the Rhone; in his conservatory he regales himself with the sight of South American flowers; in his smoking room he gratifies his scent with the weed of North America. His favourite horse is of Arabian blood; his pet dog is of the St. Bernard breed. His gallery is rich with pictures from the Flemish school, and statues from Greece. For his amusement he goes to hear Italian singers warble German music, followed by a French ballet. If he rises to judicial honours, the ermine that decorates his shoulders is a production that never *before* was on the back of a British beast. His very mind is not English in its attainments, it is a mere pic-nic of foreign contributions. His poetry and philosophy are from Greece and Rome, his geometry is from Alexandria, his arithmetic from Arabia, and his religion from Palestine. In his cradle, in his infancy, he rubbed his gums with coral from Oriental oceans, and when he dies his monument will be sculptured in marble from quarters of Carrara. And yet this is the man who says, 'Let us be independent of foreigners. Let there be taxation; let there be privation and want; let there be struggles and disappointments; let there be starvation itself; only let us be independent of foreigners!'

A similar power of caustic logic appeared in the speeches of Colonel Thompson, who, having been a writer on Free-trade long before the existence of the League, was known as the father of the movement. His illustrations were at all times short, sharp and decisive. He it was who said that "if Noah had been limited to the wheat which might be grown upon the deck of the ark, he would soon have had an outcry of surplus population, and Shem, Ham and Japheth would have formed a deputation of distressed manufacturers. There is no difference, except in the size of the experiment, whether it is an ark or an island."

Naturally, in such a season of struggle, free use was made of plain speech and invective. One of the most prominent of the masters of invective, albeit the most amiable of men, was Ebenezer Elliott, the poet of the well-known *Corn Law Rhymes*. Wherever there was a stormy discussion Elliott was sure to be in the midst of it, and his bitter denunciations bring a shudder to the nerves of a more sensitive generation. "I pray that the Duke of Buckingham may come to beg his bread," he cried, at a crowded meeting in the market place of Sheffield. And when, years afterwards, the noble mansion of Stowe was sold at auction, and the Duke of Buckingham became a pensioner upon the bounty of his son, Elliott exclaimed, "Thank God, my prayer was answered!"

Verses such as the following, which were once widely popular, give some idea of his style:

Despond not then, ye plunder'd sons of trade!  
 Hope's wounded wing shall yet disdain the ground,  
 And Commerce, while the powers of evil fade,  
 Shout o'er all seas—"All lands for me were made."  
 Her's are the apostles destined to go forth  
 Upon the wings of mighty winds, and preach  
 Christ crucified! To her the south and north  
 Look through their tempests; and her lore shall reach  
 Their farthest ice, if life be there to teach.

Yes, world-reforming Commerce: one by one  
 Thou vanquishest earth's tyrants! and the hour  
 Cometh when all shall fall before thee—gone  
 Their splendour, fall'n their trophies, lost their power.  
 Then o'er the enfranchised nations wilt thou shower  
 Like dew drops from the pinions of the dove,  
 Plenty and peace: and never more on thee  
 Shall bondage wait; but, as the thoughts of love,  
 Free shalt thou fly, unchainable and free,  
 And men, thenceforth, shall call thee LIBERTY.

In enumerating the enthusiastic workers for the cause it would be injustice to omit the name of Frederic Bastiat, whose *Essays on Political Economy* and *Sophisms of Protection* are handbooks of the subject. He lays it down as an axiom that "commercial liberty must probably pass through the same ordeal as liberty in every other form. It can only dictate laws after having first taken thorough possession of men's minds. If, then, it be true that a reform, to be firmly established, must be understood, it follows that nothing can so much retard it as the misleading of public opinion, as writings, which, while they proclaim free trade, support the doctrines of monopoly." As a motto for one of his essays, Mr. Bastiat takes the saying of Jeremy Bentham: "The request of Industry to the government is as modest as that of Diogenes to Alexander: 'Stand out of my sunshine'."

The greatest poets of the time have left memorials of the battle for commercial freedom, which whoso opens their books may read. Lines by more obscure versifiers are not so accessible now, and some of them deserve a better fate than oblivion. At the great League bazaar held

in Covent Garden theatre in May, 1845, many articles were tagged with significant verses. One which I remember was engraved upon a polished pebble and ran as follows:

Monopoly's heart here in emblem is shown,  
The comparison's right to a tittle,  
'Tis senseless and stupid and hard as a stone,  
And besides 'tis contemptibly little.

Perhaps one cannot better close these citations from the poets and wits of the time than by transcribing Douglas Jerrold's *Epitaph for Protection*: "Here lies Protection. It has lied through its life, and now it lies still."

But lest the dignity of my subject might seem to suffer by being dismissed with a jest, I must insert at least a word in closing on two great men who bore a most honourable part in the struggle—the Hon. Charles Pelham Villiers and Sir Robert Peel.

Mr. Villiers was the parliamentary pioneer in the subject. He was a free-trader before it became respectable to call oneself by that name. Year after year he presented his motion to the House of Commons for the total and immediate repeal of the corn laws, in speeches remarkable for their sound logic, and "full of wise saws and modern instances."

Of Sir Robert Peel it would be impossible to speak with justice in the short space remaining. One cannot perhaps do better than allow his own words to speak for him, the well-known summing up which contained his last words as England's Prime Minister:

"I should leave a name severely censured, I fear by many honourable persons, who, from no interested motives, have adhered to the principle of protection, as important to the interest and welfare of the country. I shall leave a name execrated by every monopolist who, from less worthy motives, maintains protection for his own benefit; but it may be I shall leave a name sometimes remembered with expressions of goodwill in those places which are the abodes of men whose lot it is to labour and earn their daily bread by the sweat of their brow—a name remembered with expressions of good-will when they shall recreate their exhausted strength with abundant and untaxed food, the sweeter because no longer leavened by a sense of injustice."

H. MOTT.

## SOME LITERARY PHYSICIANS.

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RABELAIS: GARTH: BLACKMORE: SMOLLETT: BROWN: HOLMES.

No system of classification hitherto known has dared to group writers upon the plan by which these are united—that of occupation; yet by this plan Thomas à Kempis, Swift and John Knox fall into immediate harmony, and Mandeville and de Rougemont lie not far apart; Pepys and Robert Burns, government<sup>t</sup> servants, are at once linked, and Hero of Alexandria and Robert Louis Stevenson, engineers, go arm in arm. If men wrote their occupations and their daily life into their published works, this method would be entirely satisfactory, but they do not: it is highly undesirable that physicians, to name one profession, should. Thus it is that literary physicians have written upon almost every side of mankind except that part of human nature which has to do with the absorption of drugs: they have had the grace to leave this alone in literature if not in life. As a natural consequence, the six men whose names are here written have little in common, and since they have been selected largely at random, the references here made are neither critical nor dogmatic; they are rather of the kind that gather around the last pipe and the last half-hour's reading at night, when the critical faculty, like a troublesome child, has been tucked into its crib. Well-beloved Lawrence Sterne, who lived "in a constant endeavour to fence against the infirmities of ill health and other evils of life by mirth": who was persuaded that "every time a man smiles, but much more when he laughs, it adds something to his Fragment of Life"—he, worthy invalid, had something to say. "I would go fifty miles afoot, for I have not a horse worth riding on, to kiss the hand of that man whose generous heart will give up the reins of his imagination into his author's hand—be pleased, he knows not why and cares not wherefore." To be worthy of that praise, we are not going to look critically at this group of physician writers, but take what we can find that will amuse or instruct us—and let the rest well alone.

There was born in France, about the year in which Columbus discovered America one François Rabelais, who wrote one of the most far reaching of books: it is probable that you will have heard of this same

book as one that is bad for the morals, and if you have fallen upon it in your youthful years, you may have remembered its spoken improprieties and forgotten the rest. It has a certain frank way of making its statements, but it is nevertheless a great book, and its sparkle is reflected in many French writers, and at least two English ones of note—Swift and Sterne. In the fifteenth century no synonym for the word “spade” had been discovered: even in the times of the Reformation many books were brought into being that are to-day necessarily regarded in Anglo-Saxon countries, even obscene: nevertheless they bore their part in a great movement of reform, and points of view are not absolute. With reference to any point there are as many ways of looking at it as can be drawn lines radiating from it: it is a mathematical rule that each of these lines is exactly opposite to another, and so it is that the loin cloth, permissible in New Guinea, is not regarded as strictly correct in Montreal. If this be carefully kept in mind it will be seen that an absolute condemnation can scarcely be meted out to any book that carried so much of its author’s brains as this, and the profession of medicine has reason to be proud of Rabelais. At first a monk, he quarrelled with his superiors, and for his freedom of speech or opinion was unfrocked. The painful conviction is here forced upon us that Rabelais must have said something; for even the clerical authorities of that day were, in regard to freedom of speech, somewhat well-broken: as Stanley Ortheris said of himself in the Tangi pass, “wot turns me ain’t no bloomin’ vi’lets.” After this rupture, Rabelais studied medicine at Montpellier, became physician-in-chief to a Lyons hospital: he gave courses in anatomy there with the use of the cadaver, and finally published the first part of his book. Alas, for the frailty of humanity! There were sold of it “more copies in a month than of the Bible in nine years,” he says; and, like many another, because he needed money Rabelais took to literature. Between times he was in succession physician to an embassy to Rome (concerned with the divorce of Henry VIII of England from Catherine of Arragon), professor in four different colleges, became a secular canon, and as such, head of a college; studied geometry, engineering, topography, botany, collected Syriac and Hebrew manuscripts and the works of Galen. During all this time his book was exerting no small political force, and soon excited the opposition of the government, and, which is less remarkable, of the pope. He ridiculed everybody, and consequently was frequently and virulently attacked, but he seems to have worried little over it, and his old age was passed reading Plato, Plutarch and the Gospels. He has been considered, says one, a glutton, a wine-bibber, a scoffer, a sceptic, a cynic: but was, in the eyes



of his contemporaries a man of venerable character, and ensured a thorough respect. He died at the age of 63, and the famous will is credited, probably unjustly, to him: "I have nothing; I owe much; the rest I give to the poor."

As for the book, there never was such a jumble of words, ideas, phrases, epithets, tag-ends of knowledge, wit and sarcasm boiled together in the world: connected story there is none; no book in English has the same vein, though *Gulliver's Travels* resembles it externally, and *Tristram Shandy* has its spirit. Yet it remains undescribed—the despair of translators, the joy of the guild of Tapster-Booklovers. One of Rabelais' correspondents, yclept Lang, sayeth: "But for thee, Master François, thou art not well liked in this island of ours, where the Coqcigrues are abundant, very fierce, cruel and tyrannical. Yet thou hast thy friends, that meet and drink to thee, and wish thee well wheresoever thou hast found that *grand peut-être*." It happened to a friend of the present writer, in the land of the Coqcigrues, in the street that is called Strand, that he was taken into a back compartment of the shop, where the proprietor, evincing well-defined signs of fear, cautiously laid before him a described edition of Rabelais.

From the witty Frenchman it is a far cry to Garth and Blackmore, English physician-poets of the following centuries; they may have been better physicians, but they were duller fellows. Samuel Garth, born during the Commonwealth, lives to-day (if his quiet existence can be called life) by reason of a long poem entitled *The Dispensary*. No one has read it for a long time, but when it was published it was the expression of an achievement. In 1687 the College of Physicians published an Edict requiring all Fellows and Licentiates to give gratuitous advice to the neighbouring poor; and upon the aldermen asking to whom the term "poor" should be applied, the College decided that the clergyman's certificate would be the required evidence, and so it stands to-day. The apothecaries were violent in their opposition to the benevolent methods of the College, especially when the latter took up the preparation of medicines for the poor; to aid this object, subscriptions were opened, and *The Dispensary* was published to assist. "It was," says one who knows, "on the side of charity against the intrigues of interest, and of regular learning against licentious usurpation of medical authority, and was therefore naturally favoured by those who read and can judge of poetry." Why it should be so favoured is not clear, but what balm to the souls of us who suffer at times from "licentious usurpation of medical authority." Garth spoke the Harveian oration in 1697, was knighted, and died; and

Johnson says of him "his poetry has been praised at least equally to its merit," which smacks a little of the verbal jugglery of the oracle.

Sir Richard Blackmore, who died in 1729, was a Fellow of the Royal College of Physicians; he graduated from Padua, obtained "high eminence and extensive practice," and it has been his lot to be mentioned more often by his enemies than his friends. The wits of the day criticized him incessantly, "provoked more by his virtue than his dulness": Pope and Dryden were his outspoken foes, but Johnson says "let it be remembered for his honour, that to have been once a schoolmaster is the only reproach which all the perspicacity of malice, animated by wit, has ever fixed upon his private life." A beginner in physic, he asked Sydenham what books he should read: he was told *Don Quixote*, "which," says Blackmore, "is a very good book; I read it still." Johnson's comment upon this is of application to-day. "The perverseness of mankind makes it often mischievous in men of eminence to give way to merriment: the idle and the illiterate will long shelter themselves under this foolish apophthegm." With reference to that word, Johnson was free to admit that Blackmore could scarcely be considered a classical scholar, for he confounded the terms apophthegm and aphorism. Alas for you and for me! Alas for the Century Dictionary!

Like a thief who enters not by the door, the writer appends a few of his works, the titles basely filched from his biography; *Prince Arthur*, a heroic poem; *King Arthur* (or was it *King Alfred?*); *Paraphrase on the Book of Job*; *Creation, a Philosophical Poem*, and finally, *Eliza*, in ten books. "But your worships are about to be angry at what I am saying: were it not for that I have work cut out for three days." His epitomized life is thus stated: "Of his four epic poems the first had such reputation and popularity as enraged the critics: the second was at least known enough to be ridiculed: the last two had neither friends nor enemies."

Contempt is a kind of gangrene which, if it seizes one part of a character corrupts all the rest by degrees. Blackmore, being despised as a poet, was in time neglected as a physician: his practice, which was once invidiously great, forsook him in the latter part of his life: but being by nature or by principle averse to idleness, he employed his unwelcome leisure in writing books on physic, and teaching others to cure those whom he could himself cure no longer; . . . there is scarcely any distemper of dreadful name which he has not taught the reader how to oppose. He has written on the smallpox with vehement invective against inoculation, on consumptions, the spleen, the gout, the rheumatism, the

king's evil, the dropsy, the jaundice, the stone and the plague. Rabelais would add "the devil take them all!"

About the time that Blackmore died, Tobias Smollett was born in Scotland. He was one of the unspeakable Scots who invaded London, though his place of study was Glasgow. As surgeon's mate on the Cumberland, so in the West Indies Expedition of 1740, he doubtless obtained the nautical knowledge which he used in *Peregrine Pickle*. He wrote from his youthful years, but only once upon subjects connected with physic: biographers say he was a failure as a physician. He early forsook his profession to follow literature, was editor of the *Critical Review* and the *Briton*, friend of John Hunter and of Garrick, compiler of a seven volume compend of *Voyages of Great Sailors*, author of plays, and not least, of a *History of England*. He died in 1771, a greater man than he generally obtains credit for being, and one who adorned the circles of literature if not greatly those of medicine.

*Peregrine Pickle* may not be literature of a very high order: there is no character study of the microscopic kind. Smollett's dissections are rough, but his books are readable, and that is no unreasonable thing to ask of a book, and there be many that fail therein.

Readers of *Peregrine Pickle* will recall Commodore Trunnion, whose oaths in their genial comprehensiveness almost rival those of Ernulphus; so consistent a seaman was he that his habitation was a kind of garrison, where the servants turned out, even in the night, watch and watch: Lieutenant Hatchway was his major-domo, and Tom Pipes had given up the warlike office of boat-swain's mate for the peaceful one of butler. When the gallant Trunnion was finally tangled in the web of the fair widow Grizzle, "arrived at the altar, they waited a whole half hour for the Commodore, at whose slowness they began to be under some apprehension, and accordingly dismissed a servant to quicken his pace. The valet, having rode something more than a mile, espied the whole troop disposed in a long field, crossing the road obliquely and headed by the bridegroom and his friend Hatchway, who, finding himself hindered by a hedge from proceeding farther in the same direction, fired a pistol and stood over to the other side, making an obtuse angle with the line of his former course, and the rest of the squadron followed his example, keeping always in the rear of each other like a flight of wild geese. Surprised at this strange method of journeying, the messenger came up and told the commodore that his lady and her company expected him in the church, where they had tarried a considerable time, and were beginning to be very uneasy at his delay, and therefore desired he would proceed with

more expedition. To this message Mr. Trunnion replied, "Hark ye, brother, don't you see we make all possible speed? go back, and tell those who sent you, that the wind has shifted since we weighed anchor, and that we are obliged to make short trips in tacking, by reason of the narrowness of the channel; and that, as we lie within six points of the wind, they must make some allowance for variation and leeway." "Lord, sir," said the valet, "what occasion have you to go zig-zag in that manner? Do but clap spurs to your horses, and ride straight forward, and I'll engage you shall be at the church porch in less than a quarter of an hour." "What, right in the wind's eye?" answered the commander, "ahoy, brother, where did you learn your navigation? Hawser Trunnion is not to be taught at this time of day how to lie his course, or keep his own reckoning. And as for you, brother, you best know the trim of your own frigate."

John Brown, the author of *Rab and his Friends*, appeals to but two classes, those who love animals and those who love mankind, and, more than any one of our literary physicians, did honour to his profession by his gentleness of heart. He was a Scot who lived his life in Edinburgh, and died but a few years ago. *Rab and his Friends* is a simple story, of the days when he was an intern of the Infirmary, which deals with a little household in the hills—the wife, the husband and Rab, the dog. The wife "had dark grey eyes—eyes such as one sees only twice or thrice in a lifetime, full of suffering, full also of the overcoming of it . . . her mouth firm, patient and contented, which few mouths ever are." As for her husband, bringing his wife to the hospital door in a cart, "had Solomon in all his glory been handing down the Queen of Sheba at his palace gate, he could not have done it more daintily, more tenderly, more like a gentleman than did James, the Howgate carrier, when he lifted down Ailie, his wife." Here is Rab: "One eye out, one ear cropped as close as was Archbishop Leighton's father's; the remaining eye had the power of two, and above it, and in constant communication with it was a tattered rag of an ear, which was forever unfurling itself like an old flag . . . a bud of a tail one inch long." While an operation is performed, the husband and Rab remain in the operating theatre, not aseptic, but sympathetic and unafraid. "The surgeon . . . spoke to her in his own short, kind way, pitying her through his eyes." The surgeon was Syme—and surgeons have had worse monuments than that sentence. In rapid succession blood poisoning, delirium and death carry on the story; there is the procession before daybreak with the grey horse and the cart, and Rab and his mas-

ter took away their dead to the peaceful hills. The story is simple: Syme thought as little that his eulogist stood by in the guise of a house-surgeon, as Brown thought that he was writing his own biography; extraneous sources tell us that John Brown was in the technicalities of his art a good physician; in the part that is not technical, the cure of souls, he was far greater.

A labour of love that must have been written often with wet eyes, is the little sketch, *Pet Marjory*, which tells of Marjory Fleming, who was the friend of Sir Walter Scott and of John Brown till she died at eight. She was the precocious authoress of a little diary that has not its like. "I am now going to tell you the horrible and wretched plague that my multiplication gives me; you can't conceive it. The most devilish is 8 times 8, and 7 times 8; it is what nature itself can't endure." And almost the same day is a greater trouble: "To-day I pronounced a word which should never come off a lady's lips." For my own part I am sure brother John was precisely what Marjory called him. "I will tell you what I think made me in so bad a humour is I got one or two (doses) of that bad, bad senna tea to-day." Poor little mite. She has been lying in Abbotshall Kirkyard these eighty years, but her memory is green, thanks to this man who loved her.

If the cure of the body were all, John Brown is dead, and the bodies he strove to cure and the lives he tried to prolong are now alike of the past; but since the cure of the body is not all, here is a physician who yet lives in every kindly thought that lies between the covers of his books.

Oliver Wendell Holmes, better known to most than any of the preceding, lived a life in which few notable things happened, but in which much was done. His biography pictures two men—one under, the other over thirty. Holmes at twenty-five, studying in Paris, is aggressively American, confident, unready to suppress a clever saying because it might cut, but not blind to his privileges. Patronizing, hopeful he was, and very human in his ambitions; but as the teacher he was the Holmes of his books, kind, thoughtful, loving, a man of tenderness, lecturing to his worst and dullest students rather than to his brightest and cleverest; witty, full of anecdotes, able to keep awake a fair percentage of his class at the fifth consecutive lecture of the day, and always looking at his work from the benches, with the eye of the student. But, among poets even of the second rank, Holmes was a singer of songs, mixed drollery and acute sense, funning and pathos. It would have been strange if the man who had followed Lisfranc, Larrey and Dupuytren at one

time, and sat in the Saturday Club with Emerson, Lowell, Hawthorne, Whittier and Longfellow at another, had not gathered some of the strength of the former and the sweetness of the latter.

A long quotation is a low subterfuge, yet particularly applicable to college life, and with a wide application to all life is this:

“Commencement day” always reminds me of the start for the “Derby,” when the high-bred three-year-olds of the season are brought up for trial. That day is the start, and life is the race . . . . A class is just “graduating.” Poor Harry! he was to have been there too, but he has paid forfeit; step out here into the grass behind the church; ah! there it is:—

Hunc lapidem posuerunt  
Socii mœrentes.

But this is the start, and here they are . . . . Some of the best of the colts are pranced round, a few minutes each, to show their paces. What is that old gentleman crying about? and the old lady by him, and the three girls, what are they all covering their eyes for? Oh, that is *their* colt which has just been trotted up on the stage. Do they really think those little thin legs can do anything in such a slashing sweepstakes as is coming off in these next forty years?

*Ten years gone.*—First turn in the race. A few broken down; two or three bolted. Several show in advance of the ruck. *Cassock*, a black colt, seems to be ahead of the rest; those black colts commonly get the start, I have noticed, of the others in the first quarter. *Meteor* has pulled up.

*Twenty years.*—Second corner turned. *Cassock* has dropped from the front, and *Judea*, an iron gray has the lead. But look! how they have thinned out! Down flat,—five,—six,—how many? . . . they will not get up again to this race, be very sure! And the rest of them, what a “tailing off.” Anybody can see who is going to win,—perhaps.

*Thirty years.*—Third corner turned. *Dives*, bright sorrel, ridden by the fellow in the yellow jacket, begins to make play fast; is getting to be the favourite with many. The black “colt,” as we used to call him, is in the background, taking it easily in a gentle trot. There is one they used to call *the Filly*, on account of a certain “feminine” air he had; well up, you see; the Filly is not to be despised, my boy!

*Forty years.*—More dropping off,—but places much as before.

*Fifty years.*—Race over. All that are on the course are coming in at a walk; no more running. Who is ahead? Ahead? What! and

the winning post a slab of white or grey stone standing out from that turf where there is no more jockeying or straining for victory! Well, the world marks their places in its betting-book; but be sure that these matter very little, if they have run as well as they knew how!"

Rabelais, Garth, Blackmore, Smollett, Brown, Holmes, physicians, literary or otherwise, students, even jockeys, whether you have fallen in a smashing gallop at the first hurdle, or walked past the winning post — there is one ideal attained. Those who are yet in the running, keep up the pace for a few hurdles yet,—there is one ideal attainable. It lies in these words, "as well as they knew how."

JOHN McCRAE.

## FREE EDUCATION.

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Once upon a time the precarious peace of a woman's debating society was menaced with dissolution because a member hazarded the remark that free education as understood in the States is unknown in Eastern Canada. There was silence in that place after that observation—an eloquent silence—which brought home to the rash speaker a conviction of social blundering, if not of sin. Then she was dealt with as all societies, however polite, deal with the blasphemer.

But, like Galileo in a comparable situation, her conviction was and is unshaken. "It does move, nevertheless," said he, and so in fact it did. "I am sorry they did not like to hear it," said she in the bosom of her family, "but it is quite true. Free education, as Americans understand it, is utterly unknown here"—and so in fact—but here my story begins.

To avoid vague generalizing, we will confine the elucidation of Uncle Sam's educational methods to the city of New York alone. New York's public schools are non-sectarian, and absolutely free to children of any race, class or creed. Books are furnished to the children free of charge, and so is all necessary stationery. Ten years ago the Chicago schools, while giving free education, neglected to provide stationery and other small necessities. At that time the writer used to see, almost daily, the bright little daughter of an Italian sewer digger. Though reared in a poverty stricken and squalid home, by illiterate parents, this child seemed full of mental and spiritual possibilities. It was therefore cause of regret that day after day she idled about in wretched and vicious streets, while her parents were at work. In a near-by social settlement-house the question of the hour became, "Why is Mary not at school?" The answer was found to be, "Mary has no slate, and her teacher says she must have one." To the dull Italian mother no fruit of the tree of knowledge looked so big as the dime that must be paid away before the slate could be secured. The settlement to which Mary was a welcome visitor held to the principle of inculcating self-help wherever possible. Mary's parents were able to afford the slate and



ought to buy it. One with the gift of tongues was sent to reason with them, but all her eloquence was of no avail. They would not spend the ten cents for the slate; the school would not receive Mary without it. The child continued to run the streets, learning idleness and profanity, till the settlement conceded a principle, as all who work successfully among the poor must be prepared to do. The slate was purchased, and Mary went to school. The incident shows how slight a charge for tuition or for school material may deter the children of very poor, shiftless or ignorant people. Yet it is precisely this class who need the schools most, for few other humanizing influences come into their young lives.

Absolutely free schooling and free school material are, however, but a small part of New York's care for the rising generation. In a city harbouring so many of the oppressed refugees from south-eastern Europe there are a number of children so poor that even absolutely free schools can not fully meet their needs. These children have not adequate clothing in which to go through the streets to school, and their home regimen is so low that if they got no other food they would suffer from the dullness and inertia caused by underfeeding. Their families need the work of their little hands as soon as the factory inspector can be made to believe that they are fourteen, and, therefore, they require an education somewhat different from that which the public school gives,— less of literary knowledge and more of manual training. A large proportion are little immigrants unable as yet to speak English fluently, or even to understand it readily.

The education of these newest and poorest little citizens is part of the work of the "Children's Aid Society." This noble charity was incorporated half a century ago, and in the interval it has greatly lengthened its cords and strengthened its stakes. A tale might be unfolded concerning the lodging house for homeless boys, the farm school, the summer home by the sea for children from crowded tenements, the mothers' meetings, the fresh air excursions and holiday treats for mothers and children, the restoration of little runaways to their homes, "the placing-out department," which puts orphan and abandoned children into honest country families. But all that "is another story," and we shall consider only the Society's educational work as carried on within the boundaries of New York City.

The Children's Aid Society maintains twenty-seven schools in the poor and congested sections of the city. They reach and teach more than fourteen thousand pupils. In these schools hot meals are served for the ill-nourished children of very poor people; in some cases this

is the only "square meal" the child gets in twenty-four hours. One school served more than seventy-six thousand meals in a single year.

The literary education keeps pace, grade for grade, with that given in the public schools. Besides this, instruction is given in a number of trades and handicrafts, and little girls are taught to sew and to cook. "The trades selected," says the fifty-second annual report, "are elementary carpentering, cabinet-making, cobbling, basket-making, chair-caning, rug-weaving and simple forging. These classes are alternated with the ordinary school studies, and are found to be most helpful in making school attractive to the irresponsible, half-vagrant boys we teach. To-day there are hundreds of so-called incorrigible truants from the public schools attending our industrial schools, and while their work is crude, and their behaviour often bad, the teacher puts up with it patiently, realizing that this is the one last chance to wean the boys from their vagrant street life. If they can be induced to attend school for a year, it is found that, as a rule, they settle down to some degree of regularity, and acquire pride in skilful workmanship. They are then encouraged to seek work in factories and workshops, where their manual dexterity, such as it is, gives them an advantage in wages over other boys, and they settle down to become useful workmen. This is truly a victory, and it is the recollection of many victories which encourages our teachers to endure the aggravations and bad manners they must submit to in order to reach these wild lads." These boys, positive, stirring, full of initiative, will be powers for good or evil by the time they reach to man's estate. "The public schools," said my informant, "will not be bothered with them." Such boys are much more easily interested in handicrafts than in books, and the moral effects of industrial training are found to be excellent.

The report translates the halting and broken English of one happy father as follows:—"Only one year with a clean record in my boy's life, and that year spent in your manual training class! He has been discharged from every school in the district; he was a member of a gang of boys who lived in a car down on the flats; he used bad language, played craps and went with the gang to get lead pipes. Such a change! He loves his work; his mother couldn't get him to stay at home, for he said he might miss something." The same report says, "Our girls show a decided preference for the lessons in cookery, probably because so many are entrusted at home with the preparation of the daily dinner. They try to have it well on the way by the time mother returns from her work, so that little remains for her to do in order to complete the

operation." And again, "I notice the children become punctual and regular in attendance in proportion to their proficiency in the manual training work. They are exceedingly fond of it, and would be glad to give up all of their playtime to do the work, if permitted to do so."

One beautiful feature of the Society's work is the education it offers freely to crippled children. Waggonettes belonging to the society call for these little pupils at their home, and bring them back at close of school. Still more interesting, but more pathetic, is the class for mentally defective children. "The moral improvement," says the report, "among these children has been most perceptible, and with every moral improvement comes a mental improvement." Some children, who were considered mentally hopeless, were found to be suffering from defective eye-sight. Through the kindness of a friend they were furnished with eye-glasses, and in most cases a marked improvement was noticed in their mental development. In connection with many of these schools there are free baths, and some have gymnasiums also.

Though the work of instructing adults is, strictly speaking, beyond the province of this society, one of its schools, standing in the heart of "Little Italy," does an important work among ignorant and helpless Italian immigrants. In the evening classes of this school adults and children study together. Besides the grade work corresponding to that of the public schools the women and girls are taught sewing by hand and machine, dressmaking, crocheting and simple embroidery. But the teaching of adult immigrants is largely relegated to the Board of Education. In Greater New York the Board has seventy-five educational centres where work is carried on in the evening. Many of the attending pupils are persons who are obliged to go to work very young and are now trying to repair the losses of their childhood. Some are working lads and girls, too busy to attend day school. On the "east side" of New York, where the proportion of recently landed immigrants is large, many foreigners attend these evening schools in order to study the English language. The instruction of these new citizens is the most important work of the evening schools. Not only do they learn the language spoken in their adopted country, but they also become acquainted with its coinage, customs, laws and form of government. They are taught, at first, in their own tongue. As soon as they are able to follow instruction in English, however, they are placed in English classes, even though they are as yet unable to read or write the language. They look upon the transference as a promotion and an honour.

We live in an age which necessitates special training not only in the professions but in the humbler callings of life. There is a growing demand for an educational system which will enable the pupil to earn his living, and not merely fit him for the high school. In response to this need the evening schools teach book-keeping, typewriting, architectural and mechanical drawing, and ship drafting; while for the women and girls there are classes in sewing, dressmaking, millinery and cooking.

The evening "Recreation Centres" occupy an important and unique place in the educational system of the city. Twenty-three public schools are kept open every weekday evening, except during the months of July and August, and boys and girls over fourteen are entertained there with manual work, picture-books, games, club-meetings, gymnastics and dancing. These occupations "furnish an outlet," says the City Superintendent of Evening Schools, "for the physical and mental activity of boys and girls employed during the day, to whom the methodical work of the evening schools does not appeal. Despite their long hours of labour they are physically and mentally active. They crave employment for these activities; if employment is not furnished them, many find it in the streets — find a kind that fits them for "gangs" rather than for citizenship. Only those acquainted with life as it is in tenement districts can realize what these spacious, well-warmed and well-lighted classrooms mean to the children of the street. "In one of our centres," says the same report, "a boy recently said to the principal: 'Say, I want to tell you something — but don't tell the rest of the gang — you have broken up a gang of thieves by keeping and interesting us fellows.' That lad revealed a double secret, for the power that holds the boys is the fulcrum on which all efforts for turning them into good citizens must rest." In two centres there are shower-baths. In all the buildings there are gymnasiums well equipped and sufficiently attractive to bring back the same boys and girls evening after evening. Drills have been recently introduced and are found effective in promoting correct carriage and a habit of prompt obedience. A large number of parents share the privileges of the Recreation Centres. The men especially appreciate having a place to meet their friends, and discuss the topics most in their minds, and thus the centres offer a counter attraction to the saloons of the neighbourhood.

"The Women's Clubs," says Evangeline Whitney, Superintendent of the Recreation Centres, "are growing in number and in interest. Mothers enjoy the novelty of coming to the school houses with their daughters. They don gymnasium suits and enter with zest into the

fun of the exercises. The illiterate and those who understand but very little English, listen to the piano recitals, and even to the stories read to them, with rapt attention, always carrying away impressions of a broader life than they ever dreamed of in their native lands. Many who can read are seeking to improve their knowledge of American history and literature. Glee clubs have been formed in several centres among both men and women, and one centre boasts of two orchestras. It has been found difficult to introduce industrial work, as the space for storing materials is all needed for the day work of the schools.

But the quiet hours for reading and study are proving very helpful. School children, unable to work in their noisy tenement homes, avail themselves of these comfortable rooms, where perplexities vanish under the light shed on the subject by excellent teachers. "I have seen young men studying French, German, Algebra and Geometry," says the Superintendent, "accept needed aid just as gratefully. Last spring about seventy took a civil service examination. They would hardly have undertaken it had they been obliged to study in the midst of the noise and confusion of tenement house life. Teachers in charge of these study rooms see that all books of reference required by the pupils are obtained from the school library." For general reading there is, at each centre, a table supplied with good magazines and illustrated papers. The pages of these are turned by many hands. Moreover, each centre has a traveling library which goes on its way at the end of the month and gives place to another. From September, 1903, to June, 1904, more than seventy-three thousand books circulated through New York Recreation Centres.

The work of New York's Summer Vacation Schools was but recently begun, but already its fame has spread to all the large cities of the United States. Some happily inspired person thought it a pity that school buildings, representing in the aggregate an enormous outlay should stand for two months empty and idle, while the neglected children of the hard-worked poor ran the streets, learning much evil and forgetting not only much of the knowledge gained at school but also the habits of order and industry partially acquired there. So, in some poor and thronged neighbourhoods the schoolhouses were opened, and children gathered into them from the streets were occupied with songs, marches and simple handicrafts. Thus the vacation schools began. They soon proved so helpful from the pedagogic standpoint, and the children of the poor found them so alluring, that there arose a demand for more such schools, in better neighbourhoods, for the children of the well-to-do.

Last summer thirty-nine vacation schools were too few to meet New York's demand. The novelty of having something definite to do in the long summer days, and a well equipped place in which to do it, appealed irresistibly to children of active brain and temperament.

Last summer ninety-five Kindergartens were the Elysian fields for hundreds of little children who, but for this shelter, would have wandered aimlessly about the streets. Other pupils were kept happy and busy with many useful arts and artistic handicrafts. Chair-caning appeals to boys anxious to earn money. Carpentering interests those having some mechanical ability. Venetian iron work fascinates those with a germ of artistic genius, and in some schools the results have been truly remarkable. So is the "brush work in colour"—even when one reflects that many of the ten and twelve year old artists are children of naturally artistic people.

In needlework there are elementary and advanced classes. The more proficient of the little needle-women are taught to draft patterns, and to cut and make dresses which they wear with justifiable pride during the last days of school. But no work is more successful than that of the little cooks. Last summer the girls learned to preserve fruit and prepare many nutritious dishes, and we know that practical application of all this teaching entered into many homes. The preparation of simple foods and remedies for the sick, quick aid to the injured, and the doing of commonplace things in dainty ways were all valuable lessons.

During the summer the supervisor of city history and his assistants conducted excursions to various landmarks which New York boys and girls should know. The places most attractive to the children were found to be the aquarium and the zoological and botanical gardens. These jaunts afforded fine opportunities for instruction in the art of seeing. "The written accounts of these trips," says the report, "some of them in the peculiar English of children of foreign birth, indicate an awakened civic spirit not likely soon to slumber."

In autumn there is an exhibit of work done in the vacation schools, and to one who can see with the eyes of the soul the city offers few more beautiful sights. "Last year," says the *Outlook*, "neat little dresses were shown, dolls' bedsteads, fitted with mattresses, pillows, sheets, comfortables, yea, even pillow-shams, daintily hemstitched by patient little fingers. Some of the makers never saw any other beds properly equipped and made up. One small girl stood gazing adoringly at her handiwork. At thirty, she will not spend hours hanging out of her window in contented contemplation of the street while unkempt children quarrel in a

disorderly house . . . . Particularly suggestive were the 'model farms' in boxes three feet by two. In one a story-and-a-half cottage faced the high road with its realistic poles. Fields were neatly fenced off, a card in each specifying its imaginary crop. 'Barley, 7 acres'; 'Pasture, 10 acres' (with a spring in one corner); 'Buckwheat'; 'Wheat'; 'Woods, Chestnut, Hemlock, Pine'; 'Kitchen-garden,' boasting a well; even a 'Peach Orchard, finest in U.S.A.' Poor little tenement dwelling Moritz Somethingsky, aged eleven! May his peaches come true!"

A large percentage of the children in these schools are extremely poor, and materials with which to do the work must be furnished by the city.

When the Vacation School closes its doors for the day, the child of the tenements can still be very happy and safe in some one of the public playgrounds. There are not yet so many of these as are desired. Some are perforce on the ground floors of school buildings. Some are on vacant lots. Some are on the roofs of school buildings. Some are on piers, fenced in, and cooled by the breath of the sea. An experienced Kindergartner and her assistant conduct exercises on the piers as well as in the corner of every playground. On every ground there is a trained gymnast and the usual equipment of a gymnasium, and in a number of places along the water front the city maintains swimming pools and schools. Last summer the mothers were invited to the playgrounds, and out of this grew the mothers' meetings, which were well attended. Talks were given to the mothers on topics like the following: "Advantages of the Playground, its purposes," and on "Cleanliness," "Food" and "Clothing."

On July and August evenings, while the recreation centres are closed, the roofs of some of the school houses become gardens of delight, luring parents and children out of thronged and airless streets. Thousands of feet, nimble and slow, climb the long stairs to these roofs night after night. Then for three blissful hours the people play games or watch them, talk, dance, sing together, or listen to the music of a band. In general appreciation of good music, in neatness of dress and decorum of manners these crowds reached a higher average last summer than ever before.

Even in a hasty and superficial survey of the work done by the Board of Education one must not fail to note the "Free Lectures to the People." Over four thousand of these were delivered in Greater New York during the winter of 1903-04, the last for which exact figures are

obtainable. The lecture subjects for last winter ranged from "Greek Art" and the "Songs of Shakespeare" to the "Prevention of Tuberculosis" and "First Aid to the Injured." One important work of these lectures is to acquaint recently arrived immigrants with the customs, coinage and laws of their adopted country; and another is to teach them the first essentials of cleanliness and hygiene. Some of these simple necessary talks are given and advertised in Italian and in Hebrew. More than two-thirds of the "Lectures to the People" are profusely and beautifully illustrated with stereopticon views. The lectures are delivered in the Museum of Natural History, in halls rented by the Board of Education, in halls gratuitously loaned by churches or benevolent societies, and in many school buildings scattered throughout the city. They are advertised—date, lecturer and subject—on bill-boards outside the buildings themselves, on large clearly printed cards displayed in neighbouring shop windows, in slips and booklets prepared for general distribution by the Board of Education, and in the newspapers.

As immigration pours in, the city finds itself confronted by new and newer educational problems, and the knottiest perhaps is that presented by the children described as "atypical." In a thrifty Yankee community those would be but a minute fraction of one per cent. in the school census—"a negligible quantity." But in a city so large and heterogeneous as New York they are too numerous to be ignored. They are the incarnate results of generations of over-crowding, over-working and under-feeding, little cretins, rachitic children, abnormally dull or defective children. When such a pupil appears in school the teacher is required to report its case, to ascertain many details concerning it, and to fill out a blank form furnished by the Board of Education. The child is then carefully examined by a medical expert, after a system which tests both its physical and its mental capacity. At the end of six months what is called a "follow-up card" is filled out by the teacher, and if another medical examination seems desirable, another is made. The school doctor makes his rounds conducting such examinations in every school twice a year. In many cases the little unfortunates are gathered into special classes, and given education peculiarly fitted to their needs. They receive daily three hours of manual training; they have four times as much gymnastic work as is prescribed for the normal child, and special stress is laid upon their games.

Of late the Board of Education has concerned itself also with the play of the normal child. In the elementary schools during recess, children are taught games and superintended in their play, and the



games themselves are used as a means of education in its widest sense. Any one who has worked with the untrained children of very poor city-neighbourhoods has been forced to realize how much discipline there is in play. The simplest game cannot go forward unless each player is alert in body and mind and ready to co-operate with others for the good of all. Without the readiness to co-operate every game falls flat.

A sense of the moral effects as well as the physical benefits of play has led to the incorporation of the "Public School Athletic League." Though the league is formed "to promote physical training in New York public schools," it has no official connection with the Board of Education. Its members are persons having the deepest interests of the city at heart. And its object is "to promote useful athletics and gymnastics among the pupils in elementary, high and collegiate departments of public schools, and in connection therewith to co-operate with and support athletic associations, provide athletic grounds and teachers, organize games, offer prizes and conduct competitions."

The day after Christmas, 1904, under the auspices of the league, athletic games were held in which twenty-five hundred boys participated, while the total number of boys engaged in preliminary school games was upwards of ten thousand.

Let it be remembered that all these opportunities and privileges, including books, school stationery and materials used in the manual training work, are absolutely free of cost. This is free education as New York realizes it. Of other cities in the Republic this deponent, knowing little, says less, but we can safely assume that many of them do not less but more. Now and then news comes out of the west of communities which, with purer civic administration and a smaller proportion of very ignorant and poor citizens, are able to do, in the cause of education, things hitherto unattempted in Gotham.

The immigration problem which taxes Uncle Sam's resources in several cities bears with peculiar heaviness upon New York, for it is the poorest, most ignorant and least enterprising of the new comers who "settle in" and swell the teeming population of the port of entry, while those who are more hopeful and less helpless push on to the west. The city's problem is to keep these people, many of them from the backward countries of south-eastern Europe, from becoming a burden and a menace. It is a grave question and a difficult task, but we must acknowledge that the city recognizes the importance of the question and is coping valiantly with the task. For even New York—she that makes haste to get rich, and is dazzled with the glamour of gold—sees nevertheless

this truth: That a nation's future depends no longer on the weight of her battalions, for the era of physical force is passing away. It depends not on the amount of territory she annexes, or on the material wealth she is able to acquire or to create. It depends in the long run on the integrity, the health, the intelligence, the usefulness and the contentment of the average man and the average woman. And all these depend very largely upon the teaching and training which are given to the average child. Now that poor immigrants are flocking to Montreal, is not the time ripe to ask what this city is doing for the average child? And what are we doing for the child handicapped by circumstances below the average?

There is a power to which we may attain more potent to secure happiness than the Philosopher's stone or the Elixir of Life, or even a draught from the Fountain of Eternal Youth. And that is the power to know — in our day — the things that really belong unto our peace. It is possible to come to this knowledge after our day is over — and that way heartbreak lies.

E. M. G.

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the beginning of last Session.

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*This list does not include non-technical articles published in local journals.*

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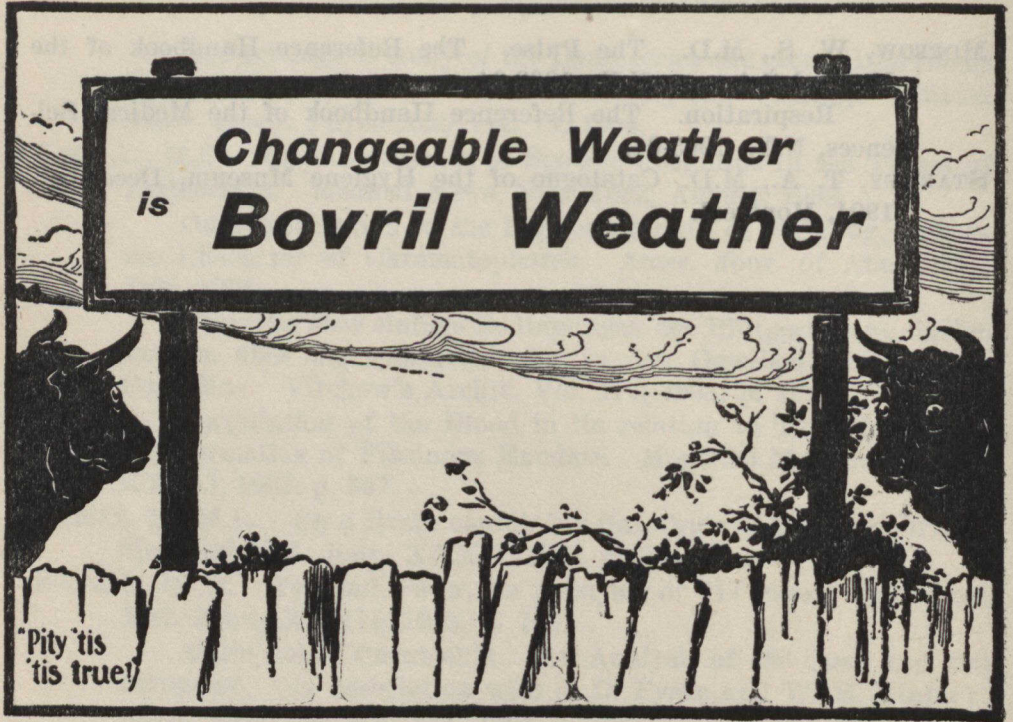
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