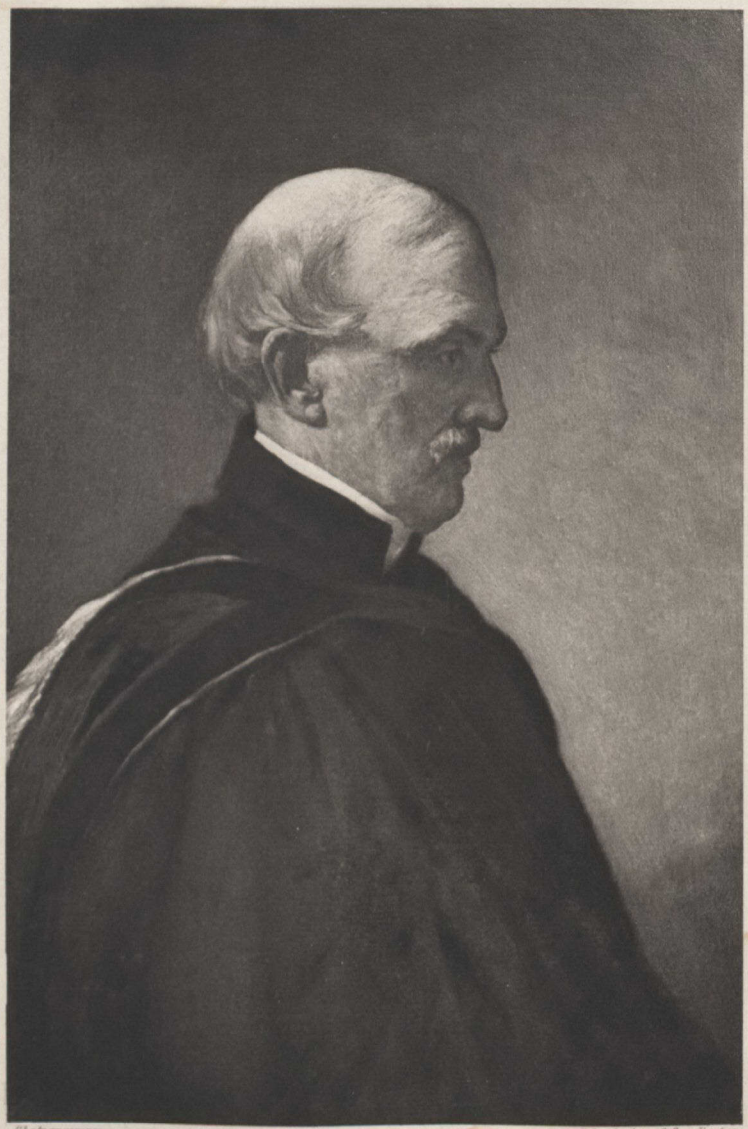

Photogravure. John Andrew & Son, Boston.

Venerable Archdeacon Leach, D.C.L., LL.D.

Vice Principal of McGill University, 1846-1886.

From a painting now in Molson Hall.

THE McGILL UNIVERSITY MAGAZINE.

Vol. IV. No. 1.

JANUARY, 1905.

MONTREAL:
A. T. CHAPMAN.

GAZETTE PRINTING COMPANY,
MONTREAL.

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[All articles and other literary communications should be addressed to the Editor-in-chief, 802 Sherbrooke St., Montreal, or to the Secretary, Royal Victoria College, Montreal. The next issue of The McGill University Magazine, being the second part of Vol. IV., will appear during the second term of the Session 1904-05.]

THE McGILL UNIVERSITY MAGAZINE.

A brief sketch of the course of events in connection with the step taken by McGill to secure recognition of its Honour graduates in Ontario may fitly open our editorial. When McGill began to act, it had not the faintest idea what attitude Ontario or its universities would assume. In the sequel, it became evident that the claims of McGill were regarded as justifiable, and that some modification of existing conditions ought to take place. Such being the general conviction of the committee appointed by the Education Department to report on the question, a proposal to establish a Provincial Board of examiners received the support of the majority. The view which Queen's took and which prevented a unanimous report regarding the methods that a change of system necessitated was, we believe, due in part to a generous desire to see McGill re-instated in ancient privilege; it was also naturally due in part to a fear of the over-lordship of a Provincial Board of examiners, of which Queen's representatives would constitute a minority. Queen's University was supported in its dissent by MacMaster. In the opinion of the minority the difficulty would be resolved by simply adding the name of McGill to the Ontario universities which enjoy the privileges McGill sought to obtain.

The authorities to whom the committee submitted a majority and a minority report took the path of compromise. No Provincial Board has been established, nor, on the other hand, has McGill alone been included in the Ontario group. A new regulation which ought to prove satisfactory to the interests of all parties concerned was drawn up by the Education Department and approved by the Legislative Assembly of Ontario. It reads as follows:—"Any person who obtains a degree in Arts in the honor department of Mathematics, Science, Classics, English and History, Moderns and History, or French and German, as specified in the calendar of any university in Canada and accepted by the Edu-

cation Department, who has graduated with, at least, second class honors (or 66 per cent. in each subject of such honor department), and who has been in actual attendance in such department at a University for not less than two academic years, shall be entitled to the non-professional qualification of a Specialist in such department." That enactment led to conferences between representatives of McGill University and the Education Department, with the result that the present honour courses at McGill in Classics, Mathematics and Modern Languages were accepted almost as they stood; the honour courses in the other literary and in the scientific departments of the Faculty of Arts required such modification as to necessitate a prolonged discussion of schemes. All courses have now been arranged to the satisfaction of the Education Department, and they await the sanction of the provincial government.

From the beginning we have asserted that this question of academic recognition is based on nationalism in higher education. Its essentials include universities, it is true, but only as parts of a much greater whole. Neither Toronto or Queen's occurred to the minds of the advocates of McGill as foes to be courted or overcome, for McGill had not the least intention of doing anything which would restrict university freedom in its sanest and loftiest sense; indeed, the action of McGill may tend to broaden it in a not very distant future. In Canada especially, where educational forces signally manage not to combine, any step in the direction of wider recognition is so much gain, and no institution can afford to be ungrateful for any help it receives from another to that end. McGill made its appeal on broad lines and thought them what they have proved to be — convincing. Now that the goal is in sight, McGill may, in the general interest, express its gratitude to those whose minds were convinced and who had the courage of their convictions. An opportunity may arise when this feeling will be put to the proof.

It should be borne in mind that the scheme of instruction which McGill has established for itself will not be subverted by making it conform to a new model. What the University has done has been to select and piece together for a group of students such portions of its curriculum as will form a course of training similar to that prescribed in Ontario. Those undergraduates who are reading for an Honour degree under the new conditions will form a band quite by themselves, and we have every reason to expect, a small band. Anyone familiar with reasons which induce students to join a particular university, and with the general conditions of higher education in the country, must admit that this recognition of McGill by Ontario leaves the active spheres of the universities almost as it found them. From time to time the phrase "provincial invasion" has been used in outside discussion, but we very

much doubt if the strength of the invaders will amount to a corporal's guard.

Provincial acknowledgment in the sphere of higher education, bound up as it so closely is with the instruments that make it feasible, the universities, naturally leads to the thought of simplifying and, consequently, strengthening educational forces by bringing universities into closer touch. What a hopeless chaos the educational requirements of our different Provinces exhibit! Of course it has to be acknowledged that the standards actually enforced by one Province might be found too exacting for another, but there still remain some unifying principles which could be applied by Education Departments and by universities to scholastic work in general. Were an approach made to uniformity of text-books, much labour, which is really needless, would be saved. It will be argued that a university naturally prescribes the works of its staff as text-books for its students, but putting that question aside for the moment, it is evident that universities might do something to unify the work of schools by agreeing to recommend the same elementary text-books, whereas at present they seem to be working at cross-purposes in this matter. There is not the faintest reason for Livy to be demanded of one set of schools and Horace of another, or for one list of English requirements to be framed for Ontario schools, another for Quebec schools and yet a third for the schools in the Lower Provinces. The publishing trade might suffer from uniformity, and also the writers solicited by it, but the general cause would not be the loser. A text-book widely used by schools means a competency and so the writing of text-books, often as much alike as two peas, goes merrily on. The adoption of a School Geography or some work of the same class, by a few States of the Union is enough to give the author a handsome income for the rest of his days, to say nothing of the publisher. There is no reason to doubt the statement, for it was made on reliable authority, that a popular geography has kept the presses of a large firm busy night and day to supply the demand caused by its adoption by a single State, to which it was sent in veritable carloads. Yet, what prevents the recognition of an educational system by which, in classics, for instance, the sole test imposed on those who wish to enter college should be a satisfactory translation at sight of very easy extracts in Latin and Greek prose together with approximately correct rendering of simple English sentences into those languages? From the legion of English Classics with all their array of notes there should be no difficulty in selecting some which might be prescribed for all Provinces alike. Of the fifty specimens of a favourite play of Shakspere edited for school purposes — and all supplying a long felt want — it would simplify and strengthen

teaching very much if the leading universities of the Dominion could be brought to choose the same edition for entrance examinations. But here, again, we confess to being sceptical as regards English Literature. The only requirement that should be made of any candidate who wishes to enter a university is a proof of his being able to write and spell English correctly. Better good English and absolute ignorance of *Hamlet*, than knowledge of *Hamlet* and English that gives no sign of any training whatever!

Speaking of universities, there are some questions at least which might very well be discussed by their representatives in conference, questions which bear vitally on the efficiency of their teaching, inasmuch as they concern means accessible to the lecturer. Take, for instance, the procuring of new works written by recognized authorities. If such happen to be in French or English and are not of strictly technical character they are submitted to a duty of 10 per cent. of their value. Could they be bought exempt from duty by professors, they would be procured in many instances, whereas at present the duty is felt to be a burden too heavy to be borne by those whose salaries can scarcely do more than furnish the means of respectable living. It is true that works cited as text-books in the calendar of any university in Canada are admitted without duty, but it would be obviously utterly impossible to make such a regulation apply to the case in point. A protest from any single university weighs lightly with the government for the simple reason that no political force lies behind it, whereas a conjoint protest might be made effective, especially if it were felt that universities were throwing themselves seriously into an endeavour to remove an iniquitous, if legal, grievance, and were using all the influence that widely scattered and numerous graduates could be made to exert. There is, perhaps, something unacademic in turning to the mere calculation of votes and parading it, but that seems to be the only effective method of bringing about a change that would certainly affect the higher education of the country for the better. And then there is the unanswerable argument that the reform suggested has nothing to do with the publishers, because the mere attempt to publish large works of an advanced and sometimes abstract character would result in insolvency. If it be claimed that popular or elementary academic literature has to be protected by an enactment which bears heavily on a small but highly responsible class, so much the worse for the argument.

The complete scheme of Rhodes Scholarships, the details of which must have taxed the ingenuity of their framers to the utmost, has at last been put into practice. Owing to the laying aside of a reserve fund to be drawn upon in special cases, McGill secured the priv-

ilege of sending two scholars to Oxford last year instead of one. In the nature of things, the vast and far-reaching ideas that prompted the founder of these scholarships to act as he did, have called forth conflicting opinions of every kind. To the ultra-conservative Oxonian the influx of new-comers, mostly colonials, awakens the fear that the tone of Oxford — which, by the way, is not possessed by Oxford alone — must suffer deterioration. The Colonial has his misgivings, too; in his eyes education in another country tends to make a man dissatisfied with the land of his birth and ultimately to wean him from districts in which he should naturally earn his livelihood. On the other hand, the imperialist is satisfied, for he regards the plan as yet another tie binding the Empire together. Apart from that aspect of Imperialism, which might be fitly termed jingo-ism, and which every now and then appears to consist simply in the empty tossing of caps into the air, there is much to be said for that view of the matter. Before the scattered and diverse parts of a wide Empire can be brought to a real feeling of union, each must know considerably more about the conditions prevailing in the others than appears at present. If the attempt to build up an empire is limited to commercial preference, its results, in whatever they may consist, will be liable to constant haggling, constant strain and an ever-present risk of severance, whereas the really potent and abiding force that makes for union is often historical conviction of destiny. The intercourse which the Rhodes Scholarships necessitate will do something to further the mutual knowledge that is at present so often lacking. Nor has Cambridge failed to comprehend what this new order of things may mean, for one college, Christ's, has set aside a scholarship to be awarded to a student on the recommendation of the authorities of the Canadian university to which he belongs. McGill has been chosen, and there is every likelihood that a worthy recipient of the scholarship of eighty pounds thus offered will soon be nominated.

One of the most suggestive features of our recent history is the evidence of an academic counter-current setting from the motherland to a colony. The reputation of the Faculty of Applied Science is sufficient to attract to McGill youth trained in the large English public schools, and presumably able to go to any institution that offers superior advantages. At present we believe there is a full score of such, and this state of things will continue just so long as McGill is able to support its claim to marked efficiency—just so long and no longer. The equipment of other departments, besides that of Engineering, has for some time been telling on persons belonging to other countries who are engaged in elaborate Physical research. From time to time distinguished European graduates find their way to McGill to take post-graduate courses

in various scientific branches in which the name of McGill stands high. It seems fitting in this connection to congratulate Professor Rutherford on his being awarded the Rumford Gold Medal by the Royal Society of London; the distinction so worthily conferred upon him is shared by the University to which his work has helped to draw attention. May he long be spared to prosecute researches which have already changed the face of Physics!

In a previous number of the MAGAZINE reference was made to the intention of establishing holiday courses in French. Whatever misgivings existed concerning them must be dispelled now by their success. Life in a French atmosphere for so short a period as three weeks can, we are assured, work marvels in producing fluency of speech; at all events those who were induced to take up the study of French in the favourable environment of Montreal speak and write enthusiastically about the progress they made. Until French is treated as a living language and not one to be acquired by the silent reading of grammars and texts, it is useless to argue that it is being properly learnt. In our experience we have met so-called teachers of French who could neither speak the language nor write it with any approach to correctness, and whose knowledge of it was confined to accidence and to the vocabulary required for translation of average difficulty. There is every indication that the number of students will show a large increase next summer, which is a proof that McGill has entered on a new sphere of usefulness aiming at scholastic efficiency.

The Conservatorium of Music in connection with the University, which was opened at the beginning of the present Session, has proved distinctly successful. Difficulties of various kinds might naturally be expected to occur in the establishment of such an institution, and they have been met with energy and perseverance by those called upon to face them. About five hundred students in all are profiting by the instruction which the timely help of Lord Strathcona made the more easily possible. The reproach of having to bring musicians to Montreal in order to have a full orchestra capable of interpreting works of the highest class will, it may be hoped, soon become a thing of the past. One aspect of the Conservatorium must not be lost sight of — we mean its influence in promoting a common interest among those who, save for it, would not be drawn together in effort. The thought borne in on those who were present at the informal and formal openings, with their mingled French and English audiences, was the truth that music is a universal language appealing to all nationalities alike.

During the present session a departure from University custom has been made in the establishment of a course of popular afternoon lectures on subjects of interest in the department of Philosophy. They have been

well attended — a proof that the University can make its influence felt in a very beneficial way in thus widening the hold of its thought in a city from which it is sometimes accused of standing more or less aloof. The example set by the department of philosophy will, we may hope, soon be followed by others whose subjects would easily lend themselves to popular treatment.

The death of Dr. MacCallum removes one tie which joins McGill University to a somewhat distant past. His work in McGill and his interest in everything that concerned the welfare of the University are too deeply appreciated to need formal eulogy from his colleagues. To the MAGAZINE he contributed articles on the early history of the Faculty of Medicine that make one realize how arduous were the labours of the men who made the humble beginnings from which the Medical School has risen to the position in which it now stands. Another distinguished graduate of the University has passed away since the publication of our last number—William McLennan. His literary instincts and ability made themselves felt early in life. As time went on, his power and charm as a writer were shown in various channels and, wherever seen, gave evidence of dignity and taste. He deserves the thanks of his country for having drawn attention in tale and verse to the romantic element in its history.

VICE-PRINCIPAL LEACH.

William Turnbull Leach was born at Berwick-on-Tweed, March 2nd, 1805. He was educated partly at Berwick, partly at Stirling, Scotland. He entered the University of Edinburgh in 1823, and took his M.A. degree in 1827. He began his divinity course of three years in the following year. At a very early age he went to live with his maternal uncle, William Turnbull of Forthbank, near Stirling, to whose liberality and affection he always felt much indebted during the period of his education. In 1831 he was licensed a minister of the Church of Scotland by the Presbytery of Stirling, and soon afterwards came to Canada under the auspices of the Glasgow Church Society. He was elected minister of St. Andrew's Church, Toronto, in 1834, and, during the time of his labours there, had no small share in the steps which were taken in the founding of Queen's College, Kingston. After about seven years' pastorate of St. Andrew's he resigned the church, his religious convictions having led him to desire to join the Church of England. He received Holy Orders from the Right Rev. Dr. Mountain, then Bishop of Quebec, and was by him shortly afterwards appointed to the incumbency of St. George's Church, Montreal, then newly erected. This charge he held for nearly twenty years, and his life during that period was a most strenuous one, for his work at McGill College was very arduous. After resigning the rectorate of St. George's Church he held that of Lachine. which he resigned in 1871. He was made Honorary Canon of Christ Church Cathedral in 1854, by Bishop Fulford, and his Chaplain and Archdeacon of the Cathedral in 1865.

On the advice and request of Bishop Mountain, then one of the members of the "Royal Institution for the Advancement of Learning," he accepted the professorship of Classical Literature in the University of McGill in 1845, an appointment which, with that of Vice-Principal, subsequently received the formal saction of the Crown. He also held

the professorships of Logic and Moral Philosophy for many years, until the rapid growth of the College requiring fresh arrangements to be made, he resigned them, but continued to lecture in English Literature. He was Vice-Principal of McGill and Dean of the Faculty of Arts for many years, until his death in 1886. ,

An old friend of Archdeacon Leach said of him: "He was a deeply read classical scholar, but his studies were not confined to Latin and Greek authors only. They extended over a very broad field; and there are few to excel him in wide range of reading and acquaintance with English Literature. As a logician and metaphysician he exhibited all the essentials that characterize the sound reasoner and deep thinker. His occasional writings were all marked with ability of the very highest order and cannot be read without the conviction that they are the productions of a superior intellect, one also that had been cultivated in the highest degree. As first minister of St. George's Church, Montreal, he became widely known as a theologian of extensive reading and deep learning, and as a liberal-minded, pious man earned the unqualified esteem of even those who differed from him in religious convictions. Dr. Leach was a most industrious, and for a long period unrequited, labourer in the cause of education, literature and science, and in the earliest and most gloomy days of McGill University worked with a zealous devotion in its behalf above all praise."

L.

"OUR SEVENTY-SIXTH ANNIVERSARY."

THE ANNUAL UNIVERSITY LECTURE FOR 1904.

The arrangement by which the Annual University Lecture is henceforth to be delivered on our Founder's Birthday marks a new departure in the internal economy of the University; and it may be expedient, by way of introduction, to set forth in a few words the reasons for the change. For several years past this lecture has been given at almost any time of the year that happened to be convenient to the lecturer. He was usually one of the considerable number of new professors who have recently enriched the teaching staff, and, though sometimes pleading for a few months' grace, he was not at heart unwilling to avail himself of so conspicuous an opportunity of setting forth, before an audience intended to represent the whole University, the special importance and attractiveness of his particular subject. With the growing solidarity of the Faculties, and an increasing consciousness on the part of all of us that we belong to one common whole, the view has been expressed, and has found very gratifying support, that the proper way for a great University to begin its annual operations is for all its members to meet together with one accord in one place, and to signify by such meeting their acceptance of the watchword "unity amid diversity." Every year that adds itself to our history witnesses an ever growing complexity in our academic machinery. But it is easier now, perhaps, than it has sometimes been—even notwithstanding the fact that the Molson Hall

has become quite inadequate to our needs—to cherish the feeling that we are all members one of another, and that nothing can happen in any section of the University that is not of interest and importance to the whole.

This being so, the suggestion was received from the Academic Board that our Founder's Birthday, which falls so fitly almost at the beginning of the session, would be the proper occasion for the holding of such an annual celebration. James McGill was born on the 6th October, 1744. It may be said that he " builded more wisely than he knew " when he made provision for the foundation of a college which—though it has reached a development surpassing, in all likelihood, his fondest dreams —is still content to bear his name. In reading recently Mr. Morley's *Life of Gladstone*—a work which, in view of the author's approaching visit to McGill, had for me a double interest, and which has just been characterized by Dr. Goldwin Smith as the most notable event in the publishing world since the issue of the first volumes of Macaulay's History—in reading Gladstone's life, I was much struck by the way in which, under fortunate circumstances, individuals may link the centuries together. Mr. Gladstone's father was born in 1764, and died in 1851. The great statesman himself lived to see his 88th birthday before his death in 1898. James McGill was born 20 years earlier than Mr. Gladstone's father, and, dying in 1813, he might have left a son who could have been with us down to quite recent memory. What changes have taken place within the span of two such lifetimes! It would have been altogether impossible for our founder, when in 1813 he laid down a life full of high purpose, public spirit and honest industry, to forecast the future which we are privileged now to read like an open book. The political destiny of his adopted country must often have seemed to him full of dark and well-nigh insoluble problems. The war which raged round the proposal to found, by the aid of Government grants, a Provincial University, of which McGill College should be a component part, was only an augury of the unfortunate dualism which has since prevailed in regard to educational interests in the Province of Quebec. At the time of James McGill's death, the population of Montreal was scarcely 15,000; the extent of its foreign trade may be measured by the fact that nine ships, of an aggregate of 1,589 tons, are reported as having come up from the sea in the year 1813. Our founder's heart would thrill with patriotic exultation if he could come back to earth and witness the gigantic strides which Montreal and Canada have made in all that pertains to material progress and advancement; but may we not well believe that the moment of his greatest rapture would come when he turned to look on the noble pile

of buildings, reared by the munificence of others of his own race and speech, and standing on what is, architecturally, one of the finest University sites on the whole American continent? Conspicuous in the very centre of our common collegiate life is the spot where now his honoured bones repose: *placida compostus pace quiescit.* The steadfast purpose which he had at heart has been realized increasingly with the lapse of years, and his memory will ever be cherished by a grateful and appreciative community.

Recent research in the Matriculation Register of the University of Glasgow has brought to light the fact that nearly a century and a half ago James McGill, along with his brother, Andrew (with whom he was afterwards in partnership in Montreal) entered as a student at that famous seat of learning, as you are students here to-day.[1] It was the custom in those days to enter young, and James McGill matriculated at an age (12) at which we should hardly welcome accessions to the college which now bears his name. But the emergence of the date, and of the fact of his connexion with Glasgow University, gives additional point to a passage in the Latin address which was forwarded by Corporation to Glasgow for the celebration of its ninth jubilee, with the acknowledgement that it was from Glasgow that Montreal had received, by the hand of James McGill, "that glowing torch which is never to grow dim or to be extinguished in this land."[2] This sturdy son of Glasgow knew what its school and college system had done for his native land, and he was anxious to secure to all time the same advantages for the country of his adoption. It is not too much to say that the McGill bequest has proved the "real centre and rallying point" of English education throughout our province.

An important stage in the history of the McGill foundation is marked by the session on which we have just entered. We can now look back on seventy-five years of teaching work. It was in 1829 that, after some litigation on the subject of James McGill's will, the ceremony

[1] The entries in the Matriculation Album of Glasgow University are as under:
1756 "Jacobus McGill filius natu maximus Jacobi mercatoris Glasguensis."
1765 "Andreas McGill filius natu quintus Jacobi mercatoris Glasguensis."

[2] "Ut enim cum Scoticis Universitatibus summa nobis fuit semper necessitudo ac familiaritas, quippe qui genere, institutis, studiis quoque academicis haud multum simus dissimiles, ita artiore quodam cognationis vinculo vobiscum consociati sumus, quod Glasguae natus est, abhinc annos amplius centum et quinquaginta, noster ille conditor Jacobus McGill, cuius memoriam grato adhuc animo et summa pietate prosequimur; qui, quamquam iniquo aequoris Atlantici spatio divisus, moribundus quoque dulces reminiscebatur Argos, et voluit in novo domicilo existere Academiam quae vestrae potissimum Universitatis referret speciem. Iuvat igitur praedicare a vobis nos per illum taedam illam lucentem accepisse, quae utinam in his terris numquam obscuretur aut evanescat."

in connexion with the opening of the new college was held in Burnside House, the former residence of the founder. The institution started with a Faculty of Arts, consisting of the principal and two professors; but on the very day of the inaugural ceremony an important accession was received in the shape of a Faculty of Medicine, composed of the four professors who then formed the Montreal Medical Institute. It was mainly through this Medical Faculty, and owing to the reputation its professors had already achieved, that McGill College was able to make any progress at all during the next twenty years. What its later history was after the new charter was received in 1852, and under the long principalship of the late Sir William Dawson, it is needless here to recall. And now a new quarter-century is opening to our view. In many centres this would have been made the occasion of a great celebration, attended by distinguished representatives from other seats of learning, and by graduates from every part of the country. Thank-offerings in the shape of large additional endowments would have poured in from appreciative supporters, and some return in the shape of honorary degrees might have been made to visitors from sister universities. But though a repetition of the university dinner, last celebrated in 1896, is still within the range of possibility, the general feeling seems to be that McGill has not accomplished all she would like to do before inviting the learned world to join her in holding high festival. Those of you who may find it convenient to attend in the year 1929 will probably enjoy an opportunity of witnessing something on a scale adequate to the occasion of what will then be a centennial celebration!

On the fly leaf of an old book I find the following Greek verse:—

ἔργα νέων βουλαὶ δὲ μέσων εὐχαὶ δὲ γερόντων

Below it the scribe has obligingly furnished a Latin translation:—*Consule vir, fac vota senex, iuvenisque labora.* The meaning is that youth is the time for work, manhood for counsel, and old age for dreaming and praying. Personally, I have not yet begun to dream, or to limit myself to prayers. But as this session marks the tenth year of my residence in Montreal, it has occurred to me that it might not be considered presumptuous if I were to venture to take a forward view, and to forecast the course of the next twenty-five years in the light of the past decade. It is here that wise counsel will be needed, and prayers as well. I might have chosen as the subject of this address some topic remote from current academic questions. Like

[1] From Hesiod: v. Hyperides, ed. Blass, p. 81.

other university lecturers, I have my favourite studies, the fruits of which, so far as they can be made of general interest, might not unfitly be served up to an audience on an occasion such as this. But the principal of a modern and progressive university has to live very much in the concrete. Wherever he may go he takes his charge in thought along with him. And when he has the opportunity of addressing such an audience, and through it a wider public, he may as well try to turn it to good account, for the advancement of the common cause.

Nearly nine years ago, after but a few months' experience of conditions at McGill, I ventured to embody in a similar lecture, delivered before the University, my ideas of what we should mainly aim at in what was then the immediate future. Will you allow me first to take a backward glance, and by a kind of academic stock-taking endeavour to ascertain how far the aspirations then set forth have been realized in fact? This will probably be the best possible introduction to anything I may feel impelled to say of what is still before us as a University.

The subject of my paper was the *Unity of Learning*. Even its title may recall some of the associations of former days, and lead to some congratulations among the friends of the University on the fact that things are not now as they may once have been. McGill is "more together" to-day than it used to be. If I have been able to contribute in any way to this desirable end, it has not been only because my instincts pointed in that direction, but because I did not fail to take to heart the wise words of my venerable predecessor in office, when, in his *Thirty Eight Years of McGill* — the University lecture delivered by Sir William Dawson in 1893 — he spoke as follows: — "The operations of McGill are now so extensive and complicated that the dangers of disintegration and isolation have become greater than any others, and the Principal must always be the central bond of union of the University, because he alone can know it in all its parts and weigh the claims, needs, dangers, difficulties and opportunities of each of its constituent faculties and departments." Perhaps it was mainly with this thought in mind that I made the main burden of my own inaugural address, in 1896, an appeal for a greater degree of that recognition of the vital interdependence among all studies on which the feeling of a true University brotherhood must ever rest. Only in proportion as we sympathize with our fellow-seekers after knowledge and truth, even while cultivating for ourselves each his little corner of the fruitful field, do we realize the attitude of mind that ought to be the distinguishing mark of an academic community. There is a certain unity of purpose running through our diverse operations that ought to inspire in all of us a consciousness of common sympathies. If, on the other hand, we lose ourselves in our

special pre-occupations, holding as of little account all other studies and pursuits, we shall pay the penalty in a limitation of mental view that will debar us from enjoying the true communion of spirits. Some degree of specialization is of course a necessity of existence in days when it is no longer possible for a single mind to "take all knowledge for its province." To a large extent we must endure to be practically ignorant of much that lies outside the range of our own immediate studies; but we need not be indifferent to it. A sympathetic appreciation of the spirit and aims of workers in other fields than our own is quite within the range of every one of us—even the youngest! And it is only by cultivating this frame of mind that the individual student can make his own special pursuit a humane study, a collaboration towards universal ends, inspired with the feeling of ideality, as well as with the needed sense of the proportion of the parts to full amplitude of knowledge.

Such an attitude on the part of individuals is the best possible guarantee for its maintenance and development of that which is so often on the lips of all of us—the university spirit. May I refer to two concrete manifestations of that spirit which are among the novelties of our recent history, and which have not yet attained, perhaps, their full effect and potency? Though blessed otherwise with an excellent constitution, McGill did not possess, until recent years, any organization through the medium of which the collective wisdom of its professional staff could be brought to bear on current problems. The individual professor could make his voice heard only in his separate Faculty or through the mouth of the delegate of that Faculty or Corporation. And so it was open to him to take just as much interest, and no more, in questions of administration as his comparatively limited opportunities allowed of, and at the same time conveniently to disown all responsibility for any mistakes which, in his judgment, might be committed by the University acting in its corporative capacity. All this has been changed by the institution in 1898 of the Academic Board, charged with the duty of "considering of such matters as pertain to the interests of the University as a whole, and making recommendations concerning the same." I do not know of any more important step in the direction of solidarity than this. And we have not far to go in seeking for an illustration of the opportunities thus afforded. Undoubtedly the greatest boon that has come during recent years to the University, as a whole, is Sir William Macdonald's gift of the McGill Union. There is not a member of the permanent staff who ought not to be interested in the affairs of this institution—whether they concern its constitution, its internal

arrangements, or the regulation for its maintenance and administration. The Union is bound to play a most important part in the future in the development of student life at McGill. Well, the Academic Board provides a free outlet for the frank expression of any views or criticisms which may be entertained by any member of the teaching body on this or any other topic.[1]

Account has also to be taken of the collective wisdom of the undergraduates themselves. They are, of course, not so permanent an element in the constitution as their teachers; nothing but failure to pass the statutory examinations could retain many of their number in the service of the University beyond the usual four year limit! But their views and opinion on matters of current interest are always entitled to a sympathetic and respectful hearing. The difficulty as to the expression of these views—for "mass meetings" of so large a body are not always an easy or effective or convenient method of giving utterance to permanent policy—has been eliminated by the institution of the Alma Mater Society, corresponding to the Students' Representative Councils of the Scottish Universities. This body, on which personally I rely very greatly for the possibility of keeping in touch with student feeling, is invested with just as much authority as the general mass of the undergraduates may care to give it. Whether that be large or small, there is surely a great advantage in having an accredited medium, within the limits of the constitution, through which may be expressed any well-considered opinions that may be held by our undergraduates on any topic of current interest.

[1] Compare the following from the Report of the President of Yale University, 1903-4:—

"The growth of the spirit of co-operation between the several departments has been reflected in the increased interest and importance of the meetings of the University Council. The history of that body has been a little different from what was expected at the time of its foundation. It has less importance as a place for legislative action; it has more importance as a place for the interchange of ideas and the formation of public opinion. As far as the actual work of the government of the University is concerned, the different faculties can meet most of the problems as they arise; and whenever anything comes up where serious conflicts of interest between different faculties are involved, it usually has to go to the Corporation or to one of its committees for settlement, rather than to a body like the University Council. But this very absence of legislative power has increased the Council's usefulness as a field for the interchange of ideas. Numbering as it does on its roll some of the most influential members of the different departments, it gives to each of them the means of seeing matters of University finance or of inter-departmental co-operation approached from more sides and looked at from more standpoints than would be possible within the limits of a single faculty. The Council has a function analogous to that exercised by the English Parliament in the early days of its history—where the delegates from each part of England presented their views to men from the other parts, and were able to report back to their own constituents the judgments which they had thus been able to form concerning the interests of the commonwealth as a whole."

There remain only the graduates. McGill is rich in the affectionate loyalty of her sons, organized as they are in the various graduate societies which flourish in all the large centres of the Dominion, and also in the United States. We see too little of them here in Montreal. Perhaps, if in connexion with our annual convocation at the close of each session, a Graduates' Day could be organized, they would have better opportunities of maintaining their local connexion, and also of offering suggestions for the advancement of McGill interests in the various districts they represent.

It is not without much gratification that I find, on referring to the Inaugural Address of nine short years ago, how much of the progress then foreshadowed has been already realized. Perhaps no more important issue was raised in that Address than the necessity for the extension and re-organization of the Faculty of Arts. If this Faculty receives the foremost place in what must be a very rapid review of our recent history, I am sure I shall have the approval of all who recognize the importance of the Arts curriculum as the essential basis of the whole University fabric. Not only have we received from three different sources the three endowed professorships to the need for which I called attention in 1896 — Economics, Philosophy, Zoology — but our generous supporter, Sir William Macdonald, has greatly relieved the finances of the faculty by providing endowments also for the already existing Chairs of Botany and History. Moreover, Arts shares with the sister Faculty of Applied Science the gratification that another aspiration uttered nine years ago has been fulfilled in the most magnificent way possible, viz.: that the Department of Chemistry should be provided with new laboratories of the approved modern style, and a sufficient staff to run them. Concurrently with this strengthening of its staff and equipment, the Faculty took in hand the re-organization of the academic curriculum; with the result that we may confidently assert that there is nowhere in Canada a stronger body of teachers in this department, or a more satisfactory and "up-to-date" course of study. In this reference I must not forget the organization of the Royal Victoria College, which engrossed in the earlier years much of my time and attention. That it is an important factor in the prosperity of the Faculty of Arts, which it has greatly strengthened, goes without saying. I may be allowed to recall in particular the fact that it was in the Royal Victoria College that a new branch of study, prophesied in my inaugural address, had its birth—a department destined to grow to great proportions in our future work—the Department of Music, represented now by the new Conservatorium on Sherbrooke Street. Of the significance of this new part of our educational programme there is

much that I should like to say, but it may be well to reserve further comment for the opening ceremony to be held on the 14th of this month, under the illustrious auspices of His Excellency the Governor-General and the Premier of the Dominion.

The phenomenal success of the Faculty of Applied Science, which nine years ago was still a comparatively new foundation, is one of the brightest pages in our recent history. In a department which owes almost everything to a single giver, as regards both equipment and endowment, it is superfluous to enter into any detail; it should be stated, however, that the complete establishment of the Departments of Mining and Metallurgy, as well as of that of Architecture, falls within the period now under review. Sir William Macdonald has his reward —if indeed he looks for any reward—in the unstinted praise which is everywhere accorded to the work of this Faculty, and most recently in the reports of the Mosely Commission. For a time it seemed as if Canada were in danger of being altogether overlooked by Mr. Mosely's Commissioners, and it is a personal satisfaction to me to recall the part I took in bringing about a visit which resulted in the admission that McGill "possesses material appliances for the development of scientific knowledge at least not inferior to any that can be found in the United States." (Report, page 164.) And again: "While thoroughly equipped and doing excellent work on the literary side, McGill is particularly rich in science and applied science, and possesses in physics, chemistry, engineering and mining a staff and laboratories which are unsurpassed by those of any American university" (page 303). The commissioner who was specially charged with the duty of reporting on Canadian institutions, was particularly impressed by the proposal to open a Department of Railroad Engineering, which he characterizes as the most remarkable instance that came under his notice, in the course of his whole American tour, of the growing belief in the value of a college training. "It is significant," says Dr. Reichel, "that the most remarkable token of confidence in the value of academic work to industrial development has been furnished in connexion with McGill University. The decision of two great railway companies to establish and equip a department of railway engineering at McGill is one of immense importance to Canada. Not only will the new school enable these companies to push on their work in the North-west provinces, but it will also furnish, in the staff of officials of real scientific attainments whom it will train, a body of men who will serve as centres of industrial development of all kinds in the new districts" (page 304).

When I came to McGill the Faculty of Law had only quite recently abandoned its former status as a proprietary professional school, and

taken rank as an integral part of the University. For this welcome transformation we know what we owe to our never-failing friend and supporter, Sir William Macdonald. It may be of interest to state that at Yale University a similar improvement was effected only last year. So in this respect we can say we are more than a decade ahead of Yale. The control of the University over the affairs of the Department of Law is now as complete as in the case of the other Faculties, and the change has been accomplished with the happiest results in the way of the consolidation of mutual interests. Moreover, the successful organization of the Faculty, under a new Dean, has widened the outlook of its members and friends, and should result ere long in securing some enlargement of the sphere of its operations. Till quite recently we have all felt compelled to acquiesce in the view that local conditions naturally and necessarily restrict our Law Faculty to the task of training lawyers for the Province of Quebec. The appointment of one of its best known graduates to a Professorship at Cairo was regarded at the time as a quite exceptional occurrence. In this respect the Faculty of Law has certainly stood in a somewhat different position from the other faculties — say, of Applied Science or Medicine. The young engineer or doctor who finds no room at home can always try his fortune abroad, whereas the young lawyer when he has learnt the law of Quebec only, cannot expect to have more than one market for his wares. That market is, of course, the Province of Quebec itself. And when we consider how large a portion of the Quebec Bar is French-Canadian, and how natural it is that all but a handful of them should get their law at Laval, we shall not be surprised that — under existing conditions — the number of students in our Faculty of Law is not likely to receive any very large increase. It is true that a few find their way to us from British Columbia, Manitoba and the North-west Territories, where there are in the meantime no organized law schools. But on its present footing the Faculty of Law may be said, speaking broadly, to be a school of law for the lawyers and notaries of the Province of Quebec. This, of course, need not be understood as conveying the slightest disparagement or depreciation. If we confine ourselves in this department to merely provincial aims, so do three-fourths of the law schools on the American continent. We know how thoroughly our Law Faculty enjoys and deserves the confidence of the profession, which regards it as an efficient and well organized school, conferring a degree that ranks second to none. But may we not hope in any way to extend our present boundaries? Not to any great extent, I am afraid, under existing conditions. And yet it is desirable that Canada should possess a law school which shall be a Dominion and not a Provincial

Institution. As we grow in nationhood, we shall need more and more trained publicists and civil servants and statesmen. Where are they to get their training? If our Law Faculty is to aid in this work, she will have to add to what she has at present a good deal that she has not. By way of making a suggestion, let me say that she will need, to begin with, a chair of English Common Law. The possession of such a chair would enable us to attract more students from the West, and would show that the ambitions of our School of Law are not limited by the boundaries of our Province.

I come now to the Faculty of Medicine. The reference made at the outset of my remarks to the inaugural ceremony held in 1829, at which the already existing School of Medicine joined hands with the infant college, will have sufficed to remind you of the fact that the history of this Faculty reaches further back almost than that of McGill itself. And in the early years of stress and struggle, when McGill College seems to have been the wrestling ground of denominational factions, it was the efficiency and prestige of the Medical Faculty that kept the College alive. Let us never forget that much of the progress of this Faculty has been due to the unselfish effort and the devoted sacrifices of many who have been at various periods associated with its teaching. Since 1896 it has seemed to have reached the high-water mark of its prosperity. It has had as many students as it could easily accommodate, and the two great hospitals with which it is so closely associated have stood forth to the world with ever-increasing efficiency as models of what such hospitals should be. Many of you will be surprised, in these circumstances, if I here record my conviction that no department of our work requires more strengthening at the present time than the Faculty of Medicine, and that no claims for large endowments ought to take precedence of those which might be urged by the members of that Faculty.

Why do I say this of a Faculty one of whose proudest boasts is that it has always been able to hold its own and to manage its own affairs without being beholden to anybody? Because the facts warrant the statement. In recent years the Faculty has been fortunate in receiving a considerable sum of money from Lord Strathcona and the members of his family, given mainly for the highly desirable and, indeed, almost indispensable purpose of extending and improving the Medical Building. Apart from this, however, and some assistance in the Departments of Pathology, Physiology and Pharmacology, the Medical Faculty has in the last nine years received nothing at all from the general public, for which it does so much. If the prevailing impression is that it has no needs, or at least none that it cannot itself supply, the sooner that idea

can be dissipated the better. The demands made by the various branches of medicine at the present day — always increasing with the constant advances in medical knowledge — the crying need for more specialized instruction, and for the displacement of the large lecture by the divisional or unit system, with a greater amount of detailed teaching and more personal supervision on the part of the instructor — all this combines to render the further and fuller endowment of our Medical School one of our most pressing needs, perhaps the most urgent of all. From the very earliest days of its foundation — owing to the excellent clinical instruction provided in the hospitals — our Faculty of Medicine has been a standard-bearer among the schools of the whole American Continent. We want to keep it in the van. That is the motto—*agmina ducens*—which its patron and friend, Lord Strathcona, has chosen for his coat-of-arms in the peerage of Great Britain. We want to have it also for the motto of our Faculty. Though Montreal is not quite so big a place as New York or Boston, or Philadelphia or Chicago, we must not stand idly by and see our great School of Medicine lose the lead which it once obtained over the schools which are coming now to be so lavishly endowed and so magnificently equipped in those important centres. Nor do we wish to see our Canadian students of medicine tempted across the line to these or any other schools. That is why it is incumbent on this University, in view of existing conditions, to aim high in what it seeks to do for medicine. It is not enough to turn out each year a stated number of men, who are likely to become thoroughly sound and experienced general practitioners. That is highly important, even essential, for a young and developing country like Canada, but it is not the whole duty of a medical school which aims at first rank. The reputation of such a school must be more than merely local. It will remain comparatively unknown in the greater world of scientific medicine, if it does not train a considerable proportion of men capable of making their mark in other schools, and of becoming leading authorities in some branch of medical work. This is only one aspect of the admitted fact that nowadays a university takes rank not as a teaching machine, but according to the measure of its achievements in the higher field of research and investigation. And so the training of the scientific physician, qualified to make additions to knowledge as well as to impart it to others, must continue to be a leading feature of our school. Here comes in the need for well-equipped laboratories, giving a thoroughly sound scientific training in medicine preparatory to clinical work. This is a costly business, and it will become even more costly than it is at present, with the larger number of classes that will result from the

extension of the medical curriculum from four years to five. It is quite conceivable that this forward step, when it comes to be taken, will lose us some students. One of the disadvantages of the present situation is that we have to think too much of that not unimportant factor. About five-sixths of the gross revenue of the Medical Faculty are derived from students' fees; not much more than a paltry $8,000 comes from interest on endowments. That is a by no means secure, far less an impregnable position, and, in my judgment, it should be remedied at the earliest possible moment. Endowments should be sought for to provide, apart from fees, the salaries of the professors who occupy the scientific chairs in the Faculty—beginning with Anatomy, and including Physiology, Pathology, Pharmacology, Hygiene — and salaries large enough to make certain that these chairs shall always be filled by the very best men obtainable. Then it is not quite creditable that lecturers and assistants should be asked to work for practically nothing. How can a young physician be asked to give wholehearted service to the work of teaching for a few hundred dollars a year? And how can his chief exact from him even the routine duty required in his department, to say nothing of co-operation in research? Everybody knows that to become a first-class physiologist, or anatomist, or pathologist, or pharmacologist nowadays it is essential to devote one's whole time for many years to the one subject. Unless we can encourage our younger men to do this, where are we to look for successors to the present holders of chairs, and how are we to avoid the reproach of going abroad for them?

There is no need of the Medical Faculty—or, as far as I am aware, of any other faculty — that cannot be supplied by money. Probably over half a million of dollars would be necessary to overtake the objects to which I have referred, and the completion of the buildings — with new dissecting rooms, library, museum, etc.—as well as an adequate fund for maintenance and equipment, would call for as much again. Do not let us be dismayed by the figures. Within the last year Harvard has been assured of no less than ten million dollars for the building and fuller equipment of her medical school, and Chicago — now that the Rush Medical College has been joined to the University — is promised as much and more. There is no department of our work that has greater claims on the good will of the public than that which centres round the art of healing. It is not more doctors that we aim at turning out, but better doctors — men who have had the best available advantages in equipping themselves for the practice of the most honourable — and onerous — of all professions. The McGill Medical Faculty has done noble work in the past, and I am confident that — as soon as its needs are properly

understood — it will receive such a degree of support from an appreciative community as shall enable it to keep pace with the ever-growing demands of medical teaching and medical science.

When I say that there is no McGill want that money will not supply, I do not want to be quoted as implying that money is everything. Dollars will not create the spirit that ought to animate our work — the spirit of earnest devotion to the highest interests of the cause we serve. It is because that spirit already exists in McGill that its friends and supporters may confidently appeal for further financial aid. Gratitude for past favours need not debar us from cherishing a lively expectation of favours still to come. The present administration of the University has received some signal marks of trust and confidence. In looking back on the nine years that have passed since 1895, I cannot forget the kindness of the late Mr. John Henry Molson, who was Chairman of the Board of Governors when I came to McGill. As Chairman also of the Finance Committee, Mr. Molson had a very heavy load to carry. He knew the needs of the University in all its departments, and was greatly oppressed at times — as all finance chairmen must be — by the constantly recurring difficulty of making both ends meet. Yet when he died, it was found that he had given the administration a most signal mark of confidence by bequeathing the sum of one hundred thousand dollars for the General Endowment Fund of the University. Some of the greatest gifts he made us during his lifetime were marked by the same spirit of self-effacing devotion to the general interest. He gave the ground on which the Redpath Library stands, and (in 1893) he gave $60,000 for the purchase of land and for buildings and equipment for the Faculty of Medicine. If his name is not connected with either of these great donations, his memory remains none the less deep-graven in our hearts. It is on a portion of the lots he acquired on McTavish Street that Mrs. Peter Redpath's most welcome and valuable extension of the Library was erected in 1900.

Permit me now to indicate very briefly the lines on which the consolidation and extension of our work as a University should, according to my best judgment, be made to proceed.

I believe, in the first place, that if the time is not yet come it will soon be at hand when McGill ought very seriously to consider whether it will allow boys to go direct from school into any of the professional faculties without taking at least a partial course in Arts as a preliminary. In Medicine the curriculum has everything to gain by having Physics, Chemistry and Biology eliminated, and taken in the Faculty of Arts as introductory. The best preparation for the law course is a preliminary study of such subjects as History and Political Science.

As for the Faculty of Applied Science, if the needs of a developing country have been calling out for young engineers, the dignity of the engineering profession no less demands that they shall be as fully educated as possible. An utterance may be cited in this connexion which I once heard from the lips of President Eliot, of Harvard: "When all the leading Universities of the country require a degree in Arts or Science for admission to their professional schools — of law, medicine, divinity, teaching, architecture and applied science — an effective support will be given to the Bachelor's degree in Arts and Science such as has never yet been given in the United States; and the higher walks of all the professions will be filled with men who have received not only a strenuous professional training, but a broad preliminary culture." So, too, President Butler, of Columbia: "For a University to admit professional students direct from the secondary schools is to throw the weight of its influence against the spirit and ideals of college training, and to prepare for the so-called learned professions a large body of very imperfectly educated men."

This takes me back to the Faculty of Arts, in the recent reorganization of whose courses we had ever in view the aim of making an organic connexion with the several departments of professional study. One link is still wanting—the Chair of Education that is to lead up to the activity of teaching. When that has been supplied, the holder of the Chair — with the Normal School as his Laboratory — will be able to impress himself upon the whole education of the Province, if not of the country at large. Meanwhile, any prospective donors who may prefer to help us to strengthen and to consolidate work already undertaken will allow us to remind them that the Department of Modern Languages is utterly without endowment of any kind. We ought to have two chairs here, one of Teutonic and the other of Romance Languages and Literature. The energy which Dr. Walter devoted this year to the successful organization of a summer school of French may be expected to draw fresh attention to the needs of this most important Department. I say nothing of classics; that subject would need a lecture in itself. It is possible to obtain that "reasonable tincture of letters" for which Professor Macnaughton pleaded last year without any excessive devotion to classical study. But the friends of the classics may refer, with pardonable pride, to the "rush back to Latin" which is going on at present in the United States, and which seems to amount almost to a rediscovery in that country of what I have elsewhere called the logic of grammar. Another sign of the times is the establishment of two flourishing Classical Associations, the one in Scotland and the other in England, the members of which propose not only to give reasons

for the faith that is in them, but also to question others as to theirs. Personally, I should be the last to advocate the claims of classical study if these claims necessarily involved ignorance of the world we live in and of the natural phenomena that are about and around us. Education is meant to lead us into active life, not out of it. At the same time the brilliant discoveries of natural science, which have taught us much that our grandfathers did not know, need not induce the rapid inference that what our grandfathers did know must necessarily have been useless knowledge. If my own connexion with the classical department at McGill has resulted in any broader views of classical study — such as I pleaded for nine years ago — then in this department also we may claim that some progress has been made.

The fortunate settlement of the long-standing controversy with Ontario, on the subject of the recognition of McGill degrees for certain purposes in that province, induces the hope that we may witness in future a greater amount of reciprocity among Canadian Universities. In early days it was perhaps not altogether unnatural that our great educational institutions, separated from each other by immense distances, should have lived apart, as it were, and should have been tempted to cultivate separate interests. This has not made for unity, either of methods or of feeling and sentiment. Now that we note some slight disposition to lower the provincial boundary-fences we may perhaps hope for better things. The universities in various parts of the United States can agree to act together, when expedient, on matters of common interest; why should not we? It is not necessary or even advisable that all our universities should be moulded after the same pattern. They have all their own proper work to do. Each will in all probability develop on the lines that are most suited to its circumstances and its situation. There should therefore be less rivalry, less jealousy in the future — less belittling of each other and a greater effort to present a united front in what is after all a common cause. Some people make a great bugaboo of the British North America Act, which committed the interests of education to the several provinces. In those early days that was probably altogether a wise measure, and the Federal Government must often have had occasion since to congratulate itself that — so far as education is concerned — it could keep itself in a large measure outside the arena of provincial strife. But the education that was mainly thought of at the time of the framing of the Act was school education. The great subject of technical education, for example, had scarcely been heard of. This has been brought home to us in connexion with our new school of Railroad Engineering, which ought to be thoroughly national in character. There is certainly

nothing provincial about its origin or its aims. Again, when last year we were forced by circumstances to abandon our Faculty of Veterinary Science, it was not without the hope that it might one day be revived on a larger scale. In view of the bearing of the teaching given in that Faculty on the greatest of all our national interests — the interests of agriculture — it is matter of great regret that we should have felt obliged to relinquish it. The whole Dominion might profit by the institution — in connexion with one of our leading universities — of a great national school of Agriculture, or Agronomics, one branch of which, as at Cornell, would be Veterinary Science. I am one of those who believe that it is the duty of a university to make itself of service to the country at large by associating itself with all its leading interests. In so wide a field as that there is room for all who will co-operate—room for the Federal Government, too, if it can be induced to come in. Meanwhile we ought to cherish, in all that concerns university education, the spirit of co-operation and mutual helpfulness. The need for that in Canada was very much in my thought last year when I sat as your representative at an Imperial University Conference which met in London. High argument was addressed to the audience by various speakers on behalf of imperial unity in education — the dissemination of a better knowledge of what is going on in our universities throughout the length and breadth of the Empire, the cultivation of mutual interests, the furtherance of common aims, a sort of Federation of the Empire, in fact, through education. I could not help thinking, as I listened, that here in Canada we had better begin at home. The times are not unfavourable for such a *rapprochement*. We must not let the Empire get ahead of the Dominion. Here in McGill we have accustomed ourselves to take wide and broad views. That is why we have special reason to rejoice in everything that tends to promote the unification of our national interests, both in act and in sentiment. There have always been some who felt a difficulty over the fact that the educational institutions of our colonies have been manned to a great extent from the great British universities. Now the tide is beginning to flow the other way. Only a few months ago the Royal Society of London came to McGill to borrow Professor Rutherford for the purposes of the Bakerian Lecture. And along with the first flight of Rhodes scholars to Oxford goes our most illustrious alumnus Dr. William Osler. This process of interchange will doubtless go on increasing as the years roll on. "The result," as our friend Dr. Parkin writes in a paper which he has just forwarded to me, "the result cannot be otherwise than healthy and inspiring. Able men in the Motherland will go abroad more readily when they know that dis-

tinction won there counts at the centre. Able men born abroad in the Colonies will know that the pathway to recognition is freely open to them in whatever corner of the Empire they may happen to be. Everything of this kind counts for the unification of the nation, in work, in interest, in sentiment. It makes for continuity as well. The distinguished Canadian man of science, coming to hold up at Oxford his lamp of knowledge lighted there in the thirteenth century by Roger Bacon, is a truer prophecy of the future of the Empire, we may fairly hope, than Macaulay's New Zealander contemplating the ruins of St. Paul's from a broken arch of London Bridge."

Members of Convocation, Ladies and Gentlemen:—I have made it my aim in this address to gather up the lessons of our recent past, and to estimate the educational position which we find McGill occupying after three-quarters of a century of almost uninterrupted teaching. We have much reason to rejoice together over what has already been accomplished, and also to go forward with good hope into the future. In point of solid progress we could hardly wish the record other than it has been. McGill stands deservedly high among the learned institutions of the Dominion and of the Empire. In this respect it never stood higher than it does to-day. But it is a trite remark that learning is not everything; not all knowledge is power. Perhaps in the time to come, with the greater social advantages that are now to be at the command of the student body—with our Union, and let us hope, soon too, our Halls of Residence—the University may come to be as widely known as a school of manners, in the broad sense of the term, as it is at present for learning and solid work. You know the old motto of William of Wykeham, who founded Winchester and New College, Oxford: "Manners makyth man." Too little attention is paid in our educational programmes to the upbuilding of character. When we think of the unspeakable importance of the years which our young men spend at college, as a preparation for their after life, our hearts must yearn to do more for them than under present conditions we are able to accomplish. Manners are formed and personality is built up in the school of life — even the student school. Honesty, purity, reverence — all the moral virtues, in fact, are just as important for the youth of a country as are learning and scholarship. "Manners makyth man." We want to have a hall-mark for McGill men, by which they may be known and recognized all the world over. It lies with our students themselves to set the standard. What we wish to do is to give them all the help we can to make the most of their advantages while they are with us. College days are soon over, and they leave with the individual either the satisfaction of strenuous effort or the memory of neglected

opportunities. "How truly it is in man," as Mr. Gladstone said to the students at Edinburgh, "in man, and not in his circumstances, that the secret of his destiny resides. For most of you that destiny will take its final bent towards evil or towards good, not from the information you imbibe, but from the habits of mind, thought and life that you shall acquire during your academic career. Could you, with the bodily eye, watch the moments of it as they fly, you would see them all pass by you, as the bee that has rifled the heather bears its honey through the air, charged with the promise, or it may be with the menace, of the future. In many things it is wise to believe before experience; to believe until you may know; and believe me when I tell you that the thrift of time will repay you in after life with an usury of profit beyond your most sanguine dreams, and that the waste of it will make you dwindle, alike in intellectual and in moral stature, beneath your darkest reckonings."

W. PETERSON.

THE FUNDAMENTAL CONCEPTIONS WHICH ENTER INTO TECHNOLOGY.

(An Address delivered at the Universal Exposition, St. Louis, 1904. International Congress of Arts and Science.)

The Fundamental Conceptions which enter into Technology is a large subject and one which, from its very nature, I cannot hope to treat with completeness. In asking me to undertake its exposition, I assume it was understood that, as a technologist myself, I should naturally speak without the terminology of philosophy—shall I say in an untechnical manner?—that is, from the standpoint of a practical man.

The prevailing characteristic of the eighteenth century has been considered to be the philosophic spirit, while that of the present age is admitted to be the scientific spirit; some even call it the age of the application of science. Is it a sign of a coming reaction that I am asked to speak of what might not inappropriately be called the philosophy of science?

Science, which, at the outset, attacked the more striking facts of the external world, now busies itself with the invisible, the intangible, the inaudible. This line of growth must tend in the direction of stimulating the imagination, and of directing the mind to an investigation of the principles on which sciences are based. Thus we find that science, which at first appeared to be leading away from philosophy, is seemingly leading back to it again, and that we, its followers, have been unwittingly tracing out another of the great circles of truth. However this may be, we have now to consider the conceptions which enter into the most practical of all the sciences, and the one which, of all others, was long supposed to be purely experimental and to require no mental foundations of any kind.

A conception is a thing so subtle, so illusory, that it seems capable of receiving the work of many minds and many generations before it can be said to emerge with any—not to speak of absolute—clearness from the background of thought. Our first efforts to give it a shape bear about the same relation to the complete thought as the first rough tracing might do to a finished statue. Take, for example, the conception of the development of the individual, which is so marked a feature of all modern educational theories: How slowly it has taken shape in the thought of the world! How far are we still from acting in accordance with it! How far from realizing that *power* and not knowledge should be the true aim in education!

Towards the better understanding of technology comparatively little has been done, and that for the very natural reason that the practical has constantly turned aside the attention. The Technologue (to use a word not yet adopted into English) has been described as an intermediary between the savant and the mechanic, translating, as it were, the discoveries of the former into the uses of the latter. Although we may see reason later to modify this view, still, in a certain sense, it is quite true, and the truth of it accounts for the fact that the exponents of practical science have hitherto had little time or inclination to travel with any speed towards the realm of the abstract. Yet much good work has been accomplished. Merz has investigated the scientific spirit with a view to discover its effect on the progress of thought in Europe; Reuleaux has spoken of the evolution of science with especial reference to technology; Anderson, in his Forrest Lecture, has chosen as his subject the relation of science to engineering, and a host of others have discussed before learned societies special aspects of technology chiefly relating to the history of its development during the present century. It is little wonder that such splendid achievements as this history chronicles should so have dazzled our eyes without our enquiring too closely into its source. To-day, however, we shall try to regard these achievements only as the effects of a cause which we seek to find. We shall restrict our admiration of the constructive ability displayed in a Brooklyn Bridge or a St. Gothard tunnel; of the inventive genius shown in a Morse system of telegraphy, or a Bell telephone; of the force of insight and determination which overcame the practical difficulties of the steam-engine or saved its vineyards to France. We shall restrict our admiration, I say, and try to discover the controlling ideas which were common to all, and which impelled the directors of these great enterprises along such apparently diverse paths.

We may notice especially three of these ideas. In the first place,

these men must have observed that Nature works in no arbitrary manner, but by fixed laws; that while the earth remaineth, seed-time and harvest, and cold and heat, and summer and winter, and day and night, shall not cease.

Secondly, they must have perceived that, as Reuleaux points out, if these laws could be brought into the right relation with us, or rather, if we could bring ourselves into the right relation with them—into the line of their working—we might hope to be able to gear our small machines to the vast wheel of nature, and make it do for us what we could never do for ourselves.

A recent writer has asked us to recognize in certain inventions of man *extra-organic sense organs*; to see a projection of the human eye in the telescope and the microscope, which so marvellously extend our vision that it can resolve the misty light of the far-off nebulæ into suns, or discern in a clod of clay a world of wonder; to hear in the telegraph and the telephone the tones of the human voice so intensified as to reach round the world, and in the printed page the silent voices of long past generations; to know the express train and the ocean liner as extensions of our locomotor-mechanism; and to discover in a tool or a lever the human arm grown strong enough to perform seeming miracles.

Thirdly, these master-minds must have realized that in the study of the laws of nature and in the attempt to put ourselves into touch with them, there would certainly be revealed more and more of what seem to be the infinite possibilities of our environment.

In almost every endeavour to explain the nature of observed phenomena, fresh and important facts emerge which in their turn call for explanation. This is true, for instance, of the investigations in radio-activity now being carried out by Prof. Rutherford, in which the deductions are so novel and startling that it would have been impossible beforehand to have made any prediction as to their character. Again, what a vista has already been opened up by the interaction of the sciences! What a great development, for example, has taken place in electro-metallurgy, due entirely to the processes made possible by a combination of physics and chemistry and based upon Faraday's well known law of electrolysis!

The first and second of these conceptions, namely, that law is a fixed thing, and that if we and our work could be brought into the right relationship with the laws of nature, they would expend their mighty force in our service, make possible a process under the control of man, a process which, while having many intermediate objects, has always the same goal. Thus we may primarily study the steam engine with a view to a knowledge of its mechanism, while our ultimate aim, if we are to work with complete success, must be so to design its several parts

that it may lend itself to the power of steam with the least possible resistance.

We may conceive of a law of nature as a fixed thing, a Niagara of force; we want to construct a wheel which shall receive its impact and turn its water into fire. Nothing can change or improve the law; the only thing we can do is to make ourselves familiar with it, which may be done either by watching its operation in nature, or by causing it, as it were, to display itself before us—bringing together the materials whose interaction it is our purpose to investigate. This we call making an experiment, and it has now become the usual method of studying the laws of nature. To this fact, indeed, must be attributed much of the rapid progress of modern science, as we have no need any longer to wait, as did our ancestors, for Nature periodically to marshal her forces and cause them to defile before us.

This, in general, is all we can do with our environment. What can we do with ourselves?

In order to study to advantage we must get into line with the laws of the mind, remembering that they are, equally with heat and electricity, the laws of nature. We must make the laws of the mind work for us instead of against us, just as we are seeking to do with the forces external to us.

We find that to bring us into contact with the outer world nature has given us the five senses, and the wonder is with how small a use of them people manage to get through their lives. The reason is, perhaps, that these senses only present facts to us and facts, although necessary to thought, require, like other raw materials, to be worked up before they give us ordered knowledge.

We also find that the apprehension of a fact by the mind requires the exercise of the power of observation. This pre-supposes sensibility both of the external organ and of the brain centres, and also a certain amount of will-power which prevents the observation from being a mere photographic reproduction of the external world. The observations we speak of must be of a special character. They should be minute like those of Hunter in his study of a deer's horns; they should be accurate like those which led Adams and Leverrier to the simultaneous discovery of Neptune, and, above all, they should be selective, that is, if we are following up a special point, we should be able to fasten, as it were, on the fact which throws light on the question at issue, remembering that it is not always or even usually the feature most prominent which will put us on the track of the discovery of true connections, but more often some small detail which the ordinary person passes by unheeding. For instance, take the case of Becquerel when examining a definite point

suggested by the discovery of the Röntgen rays. At that time it was thought that the phosphorescence produced in a vacuum tube was in some way connected with the excitation of X-rays. Becquerel, therefore, examined bodies which were phosphorescent under ordinary light, to determine if they gave out rays of a similar character. On a certain dull day he happened to leave a photographic plate exposed over uranium, and to his surprise he found that a marked photographic impression was produced. Knowing that the phosphorescent light from the uranium compound persists for only a short time, he was able to draw conclusions which proved to be the commencement of the now great and important investigation into radio-activity.

Observation, as commonly used, seems to mean to see with attention. It therefore involves concentration, or the focussing of the whole force of the mind on one point for an appreciable moment of time. As soon as concentration takes place, a process of analysis begins, and we pass through the perception of likeness and difference to classification and then to generalization, by which we fit observed facts into their proper places in the scheme of nature, gathering up the new with the old into a larger and larger synthesis. Memory now comes into play to retain what we have gained; and a new impulse to gather new facts, as well as, sometimes, a fresh point of view, we gain from the contact of the new with the old and the arousing of the power of deduction.

Further, we must not overlook what is really a fact of the utmost importance — that the cultivation of observation by the sense of touch and the use of the hand as an instrument together with the possibility of making experiments which must be carried out by the hand, have led to what might be called a discovery, namely, that the training of the hand actually stimulates the brain centres. This has given to manual training its true value.

By this process, in the first place, of studying the laws of nature, either as they are presented to us in the natural course of events, or as we may induce them to display themselves before us in experiments; and, secondly, by studying them with all possible reference to the laws of the mind, including those of the interaction of the hand and the brain, we attain to that knowledge of our environment and to that plane of capacity in ourselves which are necessary preliminaries to the bringing of the powers of nature under our control in the interests of humanity.

What is the indispensable step which often intervenes, which, untaken, makes it still necessary that we should call so much of our knowledge by the name of pure science? For how many centuries had sticks been rubbed together to produce fire before Rumford, while superintending the boring of cannon in the Arsenal Works at Munich, hit

upon the true explanation of what becomes of work spent in friction? Or, as Lamb humourously puts the case, in discussing the origin of the custom of eating roasted instead of raw meat, "in process of time, says my manuscript, a sage arose, like our own Locke, who made a discovery, that the flesh of swine, or indeed of any other animal, might be cooked (*burnt,* as they called it) without the necessity of consuming a whole house to dress it. Then first began the rude form of a gridiron. Roasting by the string, or spit, came in a century or two later, I forget in whose dynasty. By such slow degrees, concludes the manuscript, do the most useful, and seemingly the most obvious arts, make their way among mankind." The veil which hid the prospect, once dropped, is not our natural exclamation, "Why did we not see that before?" What, then, is the necessary step? Is it not the exercise of just that quality which the scientific man has been blamed, and often with too much reason, for neglecting?—the divine gift of imagination, which

"bodies forth the forms of things unknown."

In his *Defence of Poetry,* Shelley points out the evil effects "which must ever flow from an unmitigated exercise of the calculating faculty," and says, "whilst the mechanic abridges, and the political economist combines labour, let them beware that their speculations, for want of correspondence with those first principles which belong to the imagination, do not tend . . . . to exasperate at once the extremes of luxury and want."

Out of such conceptions as these two, by the process just described, the science which has received the descriptive title of applied science and the general title of technology, has grown up, but almost unconsciously, for, as a matter of fact, it has arisen far more from practical necessity than from thought out schemes. We can see that it has a two-fold nature corresponding to the process referred to.

First, we can learn by specialized study how to understand and apply the principles of mechanics—which is coming to be regarded by some authors as the primary all-embracing science—to the construction of works of utility of every kind. We find this conception distinctly recognized in the founding at Harvard of the Rumford Professorship in 1816. In his will, Count Rumford reserves certain annuities "for the purpose of founding a new institution and professorship, in order to teach by regular courses of academical and public lectures, accompanied with proper experiments, the utility of the physical and mathematical sciences for the improvement of the useful arts, and for the extension of the industry, prosperity, happiness and well-being of society."

Secondly, we can train the mind of the student to work easily along lines of scientific thought; in fact, we can do much to form the scientific mind.

It will now be seen that, so far as we have considered it, technology is really a process of education—a secondary science—a process which has been described by Ellis as an entire system of education by new methods to new uses. He tells us, at the same time, that the first use of the word technology, apparently, was made in connection with the professorship just mentioned, in that Dr. Bigelow, who, for ten years, held it with marked ability and success, published his lectures under the name of the *Elements of Technology.*

We find, however, that technology, as now taught, embraces a third department of a completely different character, and one which has arisen out of the working of the third conception to which I have called attention, namely, that in the attempt to utilize the natural laws, there would certainly be revealed more and more of the infinite possibilities of our environment.

So indeed it has proved. It happens that certain investigations into the chemical and physical properties of matter, into the dynamics of steam, electricity, etc., have been made by the engineer rather than by the physicist and the chemist, because these investigations have been required by the practical work of the engineer, and because they have sometimes to be carried out on a scale inconsistent with the more delicate experiments which are the chief occupation of the physical laboratory. So it has come to pass, as a matter of convenience mainly, that engineering, besides being a profession, has been made directly responsible for certain scientific work, and may in this light be looked upon as containing within itself a pure science.

Numerous examples might be quoted as illustrating this statement from any good engineering laboratory, and I will just refer to one or two which I have taken from our own experience at McGill University. Callendar and Nicolson, with the platinum thermometer and ordinary steam-engine, were able to deduce laws of the utmost importance relating to the cylinder condensation of steam. The experiments of Adams and Nicolson, and subsequently of Adams and Coker, have thrown new light on the flow of rock masses under high pressures and temperatures, and further developments may be hoped for, as generous provision for the purpose has been made by the Carnegie Institute. By means of specially designed extensometers it has been possible to study, within the limits of elasticity, the lines of stress in beams under transverse loads, and much progress has been made in the solution of many hydrau-

lic problems, notably in the determination of coefficients and the critical velocity.

This department of technology, which is daily assuming more importance, has hitherto been little emphasized, and it naturally brings us to consider the distinction between pure and applied science and also the definition of the place we must assign to technology in the general scheme of knowledge, a definition involving the proper classification of science in the widest sense, a subject which has occupied the attention of many learned minds.

Our very word *science* itself, that is, knowledge so systematized that prediction and verification by measurement, experiment, observation, etc., are possible, is in Germany limited by the name of *exact* science and is included in a larger idea, *Wissenschaft,* which seems to embrace ordered knowledge of every kind; for example, the accepted principles which govern the search for historical and philosophical truth. The German idea of *Wissenschaft* includes at once the highest aims of the "exact, the historical and the philosophical lines of thought." "That superior kind of knowledge, dignified by the title of Science must," says one writer, "have generality as opposed to particularity, system as opposed to random arrangement, verification as opposed to looseness of assumption."

In view of what has gone before, there is no need, I imagine, further to substantiate the claims of technology to a rank amongst the sciences. We have tried to show that its material is scientific, that it is itself, in all departments, a scientific method of dealing with nature, and, in one department, an actual investigation into nature; but we shall see that its place in a general classification of science is rather a composite one.

Pure science has been defined as "the knowledge of . . . powers, causes or laws, considered apart or as pure from all applications." It involves a research into facts by which we learn to understand their nature and to recognize their laws, and its description naturally includes a history of the facts or experiments by means of which it has been made manifest. In one sense, every one of these experiments is an application of already known laws of science to something of the nature of a machine—a case exactly parallel, in outward seeming, with what is done in the ordinary departments of technology. Yet, with a true instinct, it is not called technology, and why? Because the *aim* is different. Even if the ultimate aim be utility, it is not primarily so. The first and immediate aim is to subserve no practical purpose, but to dig deep into Nature's garden and find the roots which, down in the dark, are working out their wonders.

These experiments may be called *applications of pure science,* but we will not give them the name of applied science or technology, which clearly involves the idea of utility. Whether this is necessarily a higher or a lower ideal, we will not at present consider, for we have shown that we have a claim to both ideals; but we will simply admit, nay more, we will emphasize the fact, that the technologist, in the ordinary sense, wants to know about the heat of the sun in order that he might drive its chariot with greater success than Phaethon of old. It is not *knowledge* but *power* which is his ultimate aim.

Even in the department of pure science, to which we have referred as the third department of technology, the idea of utility is more prominent than it ordinarily is in the laboratories of pure science, though still in its highest form, and acting rather as an incentive to begin the work than affecting the manner of carrying it out. For instance, the strong desire to eliminate the errors caused by the sensitiveness of metals to variations of temperature has prompted the effort to find a remedy, which has recently resulted in the use of a definite combination of nickel and steel, a material practically insensitive to temperature changes.

This idea of utility seems to be the real key to the distinction between pure science and technology.

We find technology variously described as the science of the industrial arts; as the application of scientifically obtained facts and laws in one or more departments to some practical end, which end rules the selection and arrangement of the whole, as, for instance, in the practical sciences of navigation, engineering and medicine. Again, applied science is defined as a knowledge of facts, events and phenomena as explained, accounted for, or produced by powers, causes and laws.

We see that when laws are attached to facts, whether in nature or experiment, for the purpose of explanation merely, we call it pure science, but when laws are attached to facts with an idea of utility in art, manufacture, or in the general service of humanity, we call it applied science or technology. In the first case, the fact is viewed as an instance of the law; in the second, the fact itself is the important thing. Therefore, the distinction between pure and applied science seems to be largely one of purpose; if our purpose is to establish a law we call it pure science, if our purpose is to establish a fact, we call it applied science.

We see, therefore, that technology, while in one department a pure science, investigating the laws which govern, for example, the strength of structures both as dependent on material and form, or, in general, any problem arising out of the artificial working up of natural products, is, in the main, to be called an applied science and is in fact so described. I can find no essential difference between the use of the two

terms applied science and technology, as they are ordinarily employed at present, and scarcely a case in which either of them could not be used. A notable exception is the science of medicine which is, strictly speaking, an applied science, but which is never described as technology, perhaps foreshadowing a more distinct specialization in the use of the term technology, so that it may indicate only the science of man's makings and not the science of man's doings.

The scope of technology, even as thus defined is, perhaps, its most striking characteristic.

The endless range of knowledge, opened up by an attempt to apply even the known laws of nature to the limitless array of facts, is at once apparent, even if we say nothing of facing the new problems arising in the process. Our material is evidently the whole world, with all the giant forces impelling it on its yearly circuit, lighting, heating and supporting its myriad forms of life and ruling their motion and their rest.

Where shall we find a guide in this complexity? How shall we choose between necessary and unnecessary knowledge? In theory it seems impossible to draw any line, and one never knows at what moment a new department may become essential; but, in practice, this very possibility has suggested the course which has been followed, namely, the attempt that has been made to gain a knowledge of those laws which *up to the present time,* have been adapted to practical needs. As more of these laws are utilized they too will be incorporated, and the limitations of the human mind must then be provided for, in a greater degree than is the case at present, by a scheme of options which will allow each individual to use as his *material* mainly the special knowledge that he will require in the department of technology chosen as his particular profession, and which will compel him to know of the other departments only enough to fit this into its right place in the general scheme.

Such a system of options is, fortunately, feasible by reason of the fact that the mental powers, trained to work scientifically in a given direction, can afterwards be turned to other objects. At least this is the case when the *method* of working is given the first importance, as then only is it possible to form the scientific mind.

If we examine the best modern schools of technology we find that the curriculum contains departments founded on the conceptions with which we have been dealing. We notice,

First, a study of selected laws of nature (*i.e.,* those which have already been applied to practical purposes);
(*a*) as seen in nature;

(*b*) as seen in examples and descriptions of the means by which they have been utilized. This corresponds to learning by experiment and includes especially the study of all types of machinery, implements and instruments.

Secondly, a distinct aim to train the mind of the student in accordance with the laws of the mind.

This is not usually done theoretically, *i.e.,* by any inquiry into the laws of the mind, but practically, *i.e.,* by causing the student to learn some particular form of industrial art in a scientific manner.

Thirdly, a distinct desire to encourage,

(*a*) research into the nature of the practical facts essential to any art, with a view to finding out reasons for the same in the *known* laws of nature, thereby giving workmen the opportunity to work intelligently;

(*b*) original research into the problems arising out of industrial processes, with a view to finding out unknown laws of nature, and especially those which must be investigated on a large scale.

We may observe that this classification includes in the *third* division a kind of research, (*a*), which, though not exactly pure science, as it does not seek for unknown laws but only for known laws which will fit a particular case, yet partakes of the same nature as far as the action of the mind is concerned. It is practically useful and necessary as a part of technology, because it supplies to the workers in any art the fundamental reasons which justify the employment of a certain procedure (whether such procedure has been developed by practical experiment or whether it has been developed as a result of theoretical research). This search for causes will naturally increase in importance with the growth of knowledge as to the scientific carrying out of any art, or in other words, as trades and arts tend to become more scientific.

In practice it is found that foremen, educated in a knowledge of fundamental laws as well as in scientific processes, are far more valuable, and that the workmen also will be all the better, for whatever knowledge of this kind can be given them. Numbers of firms and corporations are now acting on this principle, some even refusing to accept a message boy unless he has passed through a high school.

Further, this training, which enables a worker to recognize essential principles, has the great advantage of showing to the worker in what

direction it is possible to make advances and improvements and—no less important a matter—in what direction progress is impossible. The history of invention will emphasize the truth of this statement. How much time and brains, for instance, have been wasted in devising mechanism which involves the fallacy of perpetual motion!

We notice also that, in the second department, the classification includes instruction in the scientific process of carrying out any art required by a student for his future work. In any true university this practically useful plan is made to subserve the end of mental development in the student. This department naturally takes up a great deal of space in an institution, as there may be almost as many options as there are students. Partly for this reason, partly because it is the easiest end at which to begin a technical school, and partly because it appeals most strongly to the non-university man, as being apparently a short cut to success, it is not infrequently *all* that is understood by technology and *all* that is directly included in its definition as the *science of the industrial arts.* This scientific instruction in the industrial arts may be said to have been the beginning of technology, and where it has been over emphasized, it has given apparent justification to the idea (of which there is still a survival) that the subject is not necessarily scientific in any wide sense, and that the practical training of workers is more important than the theoretical.

Technology may be called the child of science on the one hand, and of industrial progress on the other; therefore we must not be surprised to find a very curious blending of the spirit of both in an institute of Technology.

We can do exactly the same thing at different times with a different, even with an opposite motive, but though the same thing is produced externally, the result on the mind of the student is, in each case, the result of the inner motive. What happens depends, as it were, on the point upon which the stress is laid. Wherever the spirit of science prevails, we are on the look out for phenomena which may lead us to a better understanding of a known law, or to a knowledge of some hitherto unknown law of nature. Wherever the spirit merely of industrial progress prevails, we are on the look out for some adaptations of our machines or processes which may add to the chances of commercial advantage. In the former case, while we learn the best, because the scientific, method of carrying out an art, we put at the same time the real emphasis on producing the scientific man. In the latter case you produce merely an intelligent handicraftsman, whose very highest aim is to improve his art—by no means an ignoble end, but one which might easily be ennobled and one which may and often

does defeat its own purpose—for the true scientific spirit is also a spirit of prophecy, and if you do not succeed in producing it, those things which might have been to you a new revelation will lie by your side unperceived. Merz likens Bacon to "one who inspects a large and newly discovered land, laying plans for the development of its resources and the gathering of its riches."

In this fact of scientific foresight is found a strong practical argument for curbing the impatience to acquire the training requisite for success in a practical profession—the readiness to sacrifice a more remote to a more immediate end. This impatience is still so great as to cause a serious danger that our technical schools may be tempted to give a purely professional training, or that professionalism may become overwhelmingly strong in them, and threatens to introduce, into even our common schools, a far too soon begun specialization.

That this danger exists is one reason why it is true, and probably always will be, that the scientific spirit is relatively more often produced in the students of pure science than in the students of applied science, but note that this is only relatively true. Other things must be considered. Where you can get one man to devote himself to pure science, you can find a thousand to fill the ranks of practical workers, so that you greatly multiply the actual chances of discovering the why and the wherefore of things and, at the same time, you secure the enthusiasm derived from numbers. Also besides the mere increase of chances arising from larger numbers, and the immediate effect of numbers, we can claim for the workers in applied science, under the *best* conditions, as remarkable a development of the scientific spirit as has ever been recorded in the annals of pure science. Take, for example, the great French chemist and naturalist, Pasteur, who "has been able," as Ray Lankester justly says, "not simply to pursue a rigid path of investigation dictated by the logical or natural connection of the phenomena investigated, but deliberately to select for enquiry matters of the most profound importance to the community, and to bring his inquiries to a successful practical issue in a large number of instances . . . . The discoveries made by this remarkable man would have rendered him, had he patented their application and disposed of them according to commercial principles, the richest man in the world. They represent a gain of some millions sterling annually to the community."

Moreover, we must remember, that what we have called professionalism, though limited to a sphere which appeals to our individual interest, is, after all, in part of its nature, very closely akin to the scientific spirit—inasmuch as it seeks for truth, and is often imbued with the spirit which would spend itself in the effort to achieve honest work, in the joy of

overcoming, in the patient performance of duty, or in the search for what will bring honour to the profession. Therefore, in contrasting the spirit of professionalism with the scientific spirit, it is rather the element in professionalism that we may call commercialism which we wish to avoid—the way of estimating values by money value and of measuring our interests by dollars and cents.

Further, we cannot afford to condemn even commercialism in a wholesale manner, as is often done. We are led to look for the element of real value which must be there, when we find, for instance, the last India budget pointing with satisfaction to the great increase in bank deposits in spite of plague and famine, and when we find, in general, that we are always able, to a certain extent, to measure any nation's progress by its increase in riches.

Let us notice, then, that the purely scientific man contributes greatly to the world's wealth, but seldom to his own, and has to be supported by a world which knows the value of his work and makes an appreciative *entourage*. Notice also, that the study of commercial methods is distinctly good as opposed to waste, being quite necessary to the study of economics, which is the application of philosophical and scientific principles to the conduct of life—a kind of final aim of the general application of science to life. To know how to live and conquer our environment financially, in a manner easy enough to leave some margin for intellectual advancement, seems to be a necessary condition of living on a high plane. True, one can have plain living and high thinking, but when it comes to sordid living, when the food is perhaps too little to feed the brain, or even when every scrap of energy is used up in providing for material wants, then indeed the wings of the imagination are clipped and the eagle becomes a barn-yard fowl.

If then this commercialism has so much that is good and necessary, why should we look upon it as a danger? Because, like fire, it is a good servant, but a bad master; because, in this world, we must look upward or with level eyes, or downward. We feel instinctively that true scientific thought is an *aspiration*, that a wise economy or management, a taking far-seeing advantage of circumstances, or any honourable making of money, especially for unselfish purposes, is practical common sense, and is helpful in, as it were, buying time in which we may rise to higher things. On the other hand, we feel no less that if we turn the making of money into a goal in itself, the road to it is beset with the pitfalls of greed, selfishness and dishonour, and that looking at it thus, or as the chief standard by which to measure values, is quite unworthy of our higher nature. "What lovely puppies!" exclaimed the child,

"A hundred dollars worth of dogs," remarked the lad, who was trying to reach too quickly the time when the glory of dawn melts into the light of common day.

On these grounds we feel that any teaching that allows commercialism to become too important a factor is fraught with danger. That we speak of it not as an evil but as a danger, suggests a reason why it is not shunned with more care. It is only a risk, and I am afraid that, over-confident in the steadiness of our heads, we seldom mind skirting moral precipices, but in a scientific institution, at least, we ought steadily to build up the invisible moral ideal.

Risk is a conception distinctly opposed to any science seeking after absolute knowledge, and should be as far as possible discouraged, whatever legitimacy there may be in it being replaced by a keener foresight. If we deal with risks at all, it should be in a scientific way, calculating their amount and providing for them, and we should certainly practise what we preach, estimating with care the danger of commercialism, and deciding whether it would not be better to avoid it, lest we be confronted with the necessity of providing a counter-poise for which a technical institute offers no adequate material.

It may be said that this is a side issue, and not a fundamental conception, but our assumptions are always greater than our conscious knowledge, and, in one sense, there are no side-issues. No truly scientific man can be blind to the position of his immediate object in the general scheme of things, and the more broad-minded he is the more careful will he be, that, as he moves along, he is not stirring up forces for evil; more, he will be *positive* in his effort and will try to see that it is tending to produce a man whose work shall be worthy of his own nature.

All moral issues, which have been often used in support of the idea of the new technical education, are, in the same sense, side-issues. A technical school is not, and cannot be, primarily a school of morals; but even men, sufficiently careless about their own standard of life, are glad enough to encourage and cultivate in others that stability of conduct which is the best bulwark of a democratic state. If we consider the manner in which any moral effect may be looked for, as a result of technical training, we shall see that the process must be something of the following nature. The inner eye, which sees truth, is necessarily aided by the immediate detection of errors in form, or in the nice adjustment of outward things, and the consequent emphasis which is laid upon the value of accuracy. We cannot take the first step towards a virtue until we see it clearly, and, therefore, whatever magnifies it makes that step more possible. Again, we may reflect that the enforced yet pleasant exercise of a virtue, may do much to make it agreeable and may

diminish any natural opposition to it which may happen to exist. Further still we may go, and assert that the will itself may be, and is, cultivated in the overcoming of obstacles, and, therefore, may be made the more powerful instrument of an awakened and a holy purpose—for deep down beyond all this, we come to the place where we are forced to admit that we have reached the limit of human effort, to the place where the wise will lift up "hands of faith." No science can teach a *love* of truth which shall be strong enough to conquer life. Yet, within its limits, in common with all true scientific teaching, and perhaps in a larger measure proportionate to its appeal to a larger *clientèle,* technology may lay claim to produce moral strength, truth and manliness.

Nor is this all by any means. Technology has been exalted as the spring of civilization, and it is, and not only or merely because the promoters of utility increase the ease of life, "make space and give time," and so broaden our mental horizon, but also because in the contest with the earthly and the sensual it is no small matter to be reinforced by the widespread existence of intellectual tastes, and because the patient waiting on nature, often so necessary in scientific work, tends to produce self-restraint. To self-restraint and true temperance we must look to save our civilization from passing into rottenness, as has been the fate of many another, which, dahlia-like, has blossomed only to turn into a sodden mass, because, perhaps, it has not recognized the truth that it is of no use at all to *refine* the vices of the state, that the plough, which uproots the evil weeds without mercy, must prepare the way for the waving grain and the fruitful harvest of a true civilization. We might go on—we might call attention to the self-sacrifice which often leads the man of pure science and surely, not seldom, the true technologist, to count his life well lost in the service of truth. Nor in this busy practical age must we forget that, if we choose, we can make each obstacle overcome, not a step from which, like a child in play, we can leap back to our former position, but a point of vantage from which we can scale,

> "By slow degrees, by more and more,
> The cloudy summits of our time."

There is one subject on which I should like to say a word, one that is generally used as a *contrast* to technology, namely, "fine art," or the science of beauty, the beautiful being regarded as the antithesis of the useful. I cannot feel content so to express the relation between the two.

Have we not already noticed that the inspiration of genius, no less in science than in art, requires the imagination as its *instrument,* and can only express itself in terms of its language? Also, has not

one of the greatest writers on the science of the beautiful, called our attention to the fact that beauty without strength and truth is a sham? No, there can be here no true antithesis. The power of seeing the abstract must be much the *same* mental power, to whatever subject it is applied, and whether it discovers ideal truth or ideal beauty, it matters little; the great thing is to feel the Soul of things at all, and not to be only capable of seeing with a surface realism which thinks nothing worth discussing unless it can be handled.

In practice, however, we still find a difficulty. In the early stages of technological education, drawing is recognized to be the foundation of the industrial as well as of the fine arts, but later, an apparently inevitable specialization differentiates between the two, and, except in the one department of architecture, beauty and the science of beauty have been largely ignored by the new education.

Is it really necessary to be ugly in order to be useful? Can we not lift and store our grain without disfiguring our most beautiful views? Must we strip our great forest trees and make them into bare poles from which to swing our electric wires? Should it be possible to describe any human habitations as "packing boxes pierced with holes?" Is it *really* a useful purpose which would take for any common end the glorious redwood forests, planted before the Christian era, "for the service of man" indeed, but for what service—to build him a house—to kindle him a fire—or to waken his soul to a knowledge of its own value?

Here then is not a danger to be guarded against, but a want to be supplied. We need the *imagination* in the highest departments of technology, but there is at present no distinct training for it, and there should be, if only to help a man to realize the *unity* of his own mental being and the mighty unity of Nature, which could give us a type of the fixity of law in the rainbow, of all colours the most beautiful and ephemeral, of all forms the strongest, throwing across the clouds, still black with threatening, its perfect arch—

> "A glorious thing that dauntless, deathless,
> Sprang across them and stood steady."

HENRY T. BOVEY.

MARGARET FULLER.

The literary history of the United States is full of enigmas which are unsolved to this day, because we have no contemporary criticism of any value to guide us. All just appreciation is lost in the adulation of friends and the calumny of enemies. There has always been a lack of that balanced judgment which gives us so accurate a notion of French and English writers of a time even much anterior to that of which we are about to speak. George Sand we know, George Eliot we know, but what manner of person was Margaret Fuller?

The case is the more difficult, inasmuch as it concerns a woman. A man can know very little about a woman, even under circumstances the most favourable for procuring knowledge. Lord Byron admitted that much; and he is generally accredited with diligence in pursuing all paths which might lead to information, and employing every means that might minister to his curiosity.

One who writes anything worth reading is bound to find dissenters, but the worst foes of a literary person are those of his own household. All that is required for the hasty condemnation of any one is the publication of everything which is publicly known, told secretly or imperfectly remembered. We know how the Carlyles and Ruskins suffered; but Margaret Fuller suffered worst of all, because her friends were so highly endowed with folly. Malice is powerless to bring down a reputation; silliness will lay it in the dust.

This "gifted woman,"—it is well, at once, to commence using the epithets of her biographers—save for a little published criticism which now seems obvious enough, left not behind her the expression of a single thought which is essentially worth remembering. Yet her friends have aspired to set her in a place above Elizabeth Barrett Browning, above the two Georges, Sand and Eliot; they have brought her lower than

Mary Baker Eddy. After the manner of all foolish disciples, they have so distorted the object of their worship, that it is now difficult to see her as she was. That is why the personality of Margaret Fuller is an enigma.

There are two methods of writing biography, the exhaustive and the selective. In the one case, everything that is known or surmised is reported with undiscriminating fidelity; in the other, the facts, surmises and probabilities are taken as a whole and duly considered. The writer himself forms an image and presents it as a true epitome, after the manner of any artist. At first sight it would appear that if we had all contemporary knowledge of individuals, we should know them as they are; but this is not so. We have to create the image for ourselves, and it will be coloured by the insistence which we place upon this fact or upon that. But, after all, the manifestations of the individual life are too elusive to be caught and transmitted in any such rough fashion, even if we admit the utmost good faith on the part of the reporters, and that is an inference which we are not always justified in making.

Margaret Fuller's life has been treated in this exhaustive way. The hysterical vagaries of her childhood, the follies of her over-mature youth, the absurdness of her young womanhood, are all preserved to us by writers little less hysterical and quite as absurd as herself. This mass of pseudo-information is contained in five bulky volumes of printed and written material, in volumes of letters to and from notable persons of the time, in diaries, numerous and minute, and in reminiscences by everyone who might remember anything. These reminiscences, however, were written for the most part at a time when their authors' memories had failed, and they spent a great deal of labour in remembering very unimportant things.

This raw material has been handled over and over again; in earlier days by James Freeman Clarke, William Henry Channing—cousin of one William Ellery and nephew of the other. It may be necessary to remind this generation that Clarke was founder of the Church of the Disciples at Boston in 1841, and pastor of the flock till his death; that Channing was close to the formulators of American Unitarianism, and allied with the Fuller family, his cousin Ellery having married Ellen, the sister of Margaret. Neither was Emerson himself wholly free from blame. At a later date Julia Ward Howe, herself an important personage in New England, became Miss Fuller's formal biographer, and still later, Mr. Higginson, whose appreciation is in some degree tempered by a just criticism.

Two or three illustrations will serve to show what kind of doctrine we are likely to expect from these biographers. In striving for an

explanation of Miss Fuller's authority, Mrs. Howe never got beyond asking the question: "What imperial power had this self-poised soul, which could lead in its train the brightest and purest intelligences, and bind the sweet influence of starry souls in the garland of its happy bowers?" The present writer does not know. Again, when Miss Fuller was passing through the stage common to all young ladies and desired to protest her resolution to remain in the unwedded state, she expressed herself after this manner: "My pride is superior to any feelings I have yet experienced, my affection is strong admiration, not the necessity of giving or receiving assistance or sympathy." In this innocent remark Mrs. Howe finds proof that "she acknowledges the insufficiency of human knowledge, bows her imperial head and confesses herself human." Thirdly, when Mr. Higginson is describing the diverse elements present at the inception of that strange literary product, the *Dial,* he refers to it as an "alembic within which they were all distilled, and the priestess who superintended this intellectual chemic process happened to be Margaret Fuller." All this time, he admits, he had in his possession documents pertaining to an early love affair, which, if published, as they have since been, "would bring her nearer to us, by proving that she with all her Roman ambition was still a woman at heart." If Margaret Fuller be treated as an imperial being, who only in a mood of self-depreciation, or in a moment of magnanimity bows her head and confesses herself human; if she be looked upon as a Roman priestess superintending a chemical process going on in an alembic, or as a "rapt sylph"— this was Bronson Alcott's view expressed in sonnet form, as if she were a Sixth Avenue seer—we shall never get much further.

If, however, she be considered merely as a woman, we may get some light upon her personality, but if this matter be too high for us, certainly we shall get some light upon the personality of that strange group which has written itself down as her friends. They all lived together during a period of folly, it is true; but that is not the whole matter. A New England prophet has always had the most honour in his own country, amongst his own kin; and contrary to the observation of Emerson, the ship from a Massachusetts port has ever been more romantic to its own passengers than any other which sailed the high seas.

At any rate, Margaret Fuller was an interesting personage, interesting even yet, and we shall first show forth fully the presentation her biographers make before enquiring what manner of woman she really was. Mrs. Howe protests that "to surpass the works of Clarke, Emerson and Channing, is not to be thought of;" but she has surpassed them and made their "precious reminiscences" more precious still. She found ready to her hand a most unfortunate document, namely, the

introductory chapter to an autobiographical romance, entitled *Marianna*, written by Margaret Fuller herself, which was seized upon and dealt with as authentic history. It deals with her childhood, and when elevated out of its proper place conveys an impression of the individual which is totally wrong. Few men, and fewer women could desire that the vagaries of their childhood should be remembered against them. Even the sick-bed delirium of the neurotic child is preserved for our admiration. As delirium it is excellent, as biography it is misleading.

Margaret Fuller was a neurotic child and suffered from actual hysteria. Ideas controlled her body, and as the ideas of a child are of the slightest fabric, it may be imagined what that control amounted to. In the children of New England from the earliest time there has been a streak of hysteria which occasionally broadened out into a dark pool of human misery and deception.

At nine years of age the little Margaret was sent to school in Groton, where she amused and tormented teachers and pupils by her fantastic freaks. In return they perpetrated a bit of pleasantry upon her, with the result that she went to her room, locked the door and fell into convulsions. Quite naturally for a child in her condition, she "did not disdain to employ misrepresentation to regain the superiority in which she delighted," and when convicted, "she threw herself down, dashed her head upon the iron hearth and was taken up senseless." Old Judge Stoughton of Salem thought he understood the import of such manifestations.

No wonder the child's character "somewhat puzzled her teacher;" it has misled her biographers too, and will be certain to puzzle them till the essential nature of hysteria is disclosed. They should not have been puzzled. By heredity the child was endowed with a nervous organization, mobile and abnormally sensitive, and her environment was not peculiarly suited to her temperament. All of her paternal relations were eccentric, some of them were of unstable will, and she herself was accredited with genius. The Puritan girl has ever been a pitiable and tragic figure. The child's education could not have been worse devised. Timothy Fuller, her father, was a lawyer, politician and son of a country clergyman, bred in the Harvard of those days, absorbed in the interest and business of his profession, "intent upon compassing the support of his family," all of which proves his incapacity as educator of his own child. The mother is described as "one of those fair flower-like natures" which abounded in the early days. These pilgrim mothers doubtless had their own trials. Had the management of the child been left to her, we might have escaped all this pathological record of hysteria. The incapacity of every father is now, I believe, a subject of free and frequent com-

ment in the domestic circle; in those days the father's wisdom and authority went unquestioned.

The child's surroundings, we are told, were devoid of artistic luxury, and that was quite proper if these surroundings be regarded merely as the "prophetic entrance to immortality," but she had to frequent them a weary time before she found the door. Truly, as Mrs. Howe says, there was an absence of frivolity and a distaste for all that is paltry and superficial,—small danger that her "inner sense of beauty would be lost or overlaid through much pleasing of the eye and ear." No wonder the child acquired a great "aversion to the meal-time ceremonial, so long, so tiresome," that her aunts cried out upon the "spoiled child, the most unreasonable child that ever was, if brother could but open his eyes to see it." After being kept awake for hours waiting till her father should return to hear her recite the labours of the day, no wonder her aunts were puzzled at her unwillingness to go to bed. These good women did not know that so soon as the light was taken away the little girl saw colossal faces advancing slowly, the eyes dilating and each feature swelling loathesomely, to return again after being driven away by her shriek of terror. When at length she did go to sleep, it was to dream of horses trampling over her, or as she had just read in her Virgil, of being amongst trees that dripped with blood where she walked and walked and could not get out, whilst the blood became a pool and splashed over her feet, rising higher and higher till soon she dreamed it would reach her lips. No wonder she arose and walked in her sleep, moaning all over the house, or found the pillow in the morning drenched with tears on which she had been dreaming that she was following her mother to the grave. Where was the mother all this time? Alas for our poor mothers!

Another example of her father's perspicacity still remains in his opinion, that "she would go crazy if she did not leave off thinking of such things," little suspecting that he and his system were the enchanters that called forth those night monsters. At the age of six, this infant was employed in the study of Latin, though her young life was "somewhat" enlivened by the lightness of English grammar, "and other subjects various as the hours would allow." At eight, the Latin language had opened for her the door to many delights, for the Roman ideal, definite and resolute, commended itself to her childish judgement; in Horace she enjoyed the courtly appreciation of life; in Ovid, the first glimpse of mythology carried her to the Greek Olympus, at least her biographers say they think so, but that is probably a guess. The modern counterpart of this "wonder child" is the "laboratory child," whose food is weighed and calculated in calories, the result of it measured by all the processes of kinetics.

One Sabbath morning the young child was casting her eyes over the meeting for religious purposes in a vain search for the Roman figures she knew so well, for the characters from Shakespeare she loved. They only met the shrewd honest eye, the homely decency, or the smartness of the New England village; or her gaze rested upon a family occupying the next pew, which was her particular aversion, for, as she tells us, "the father had a Scotch look of shrewd narrowness and entire self-complacency." As she looked about, her attention was next arrested by a woman foreign to that scene, with her fair face, her strange dress, the unusual arrangement of her hair, her reserved, self-possessed manner. Such an "apparition" would arrest attention in Cambridgeport even in these times. The stranger proved to be an English lady who possessed the two remarkable accomplishments of painting in oils and playing on the harp. It appears there were others who admired the stranger in their own way, "but she lightly turned her head from their oppressive looks and fixed a glance of full-eyed sweetness on the child." The relation between the two was delightful, till at length the stranger "went across the sea." They corresponded for many years, as the habit then was, and even her "shallow and delicate epistles" did not serve to disenchant the growing girl. This is not the usual result of a long correspondence.

Left alone, Margaret fell into melancholy again, and her father, who further reveals himself in his "distrust of medical aid generally," appears to have had a conversation with his sisters during which some heat was manifested. At any rate he concluded to send his daughter to school with her "peers in age." The school chosen was the Misses Peabody's at Groton as has already been indicated. There, as Mrs. Howe observes, she was content, "so long as she could queen it over her fellow pupils, but the first serious wounding of her self-love aroused in her a vengeful malignity,"—fearful words to employ in relation to a girl of tender years.

Doubtless these things occur in boarding schools at this day, if we can believe what we hear; when they are made the material of an autobiographical romance they are apt to assume a false importance. It was in this school that the foolish bit of pleasantry occurred. The children, shocking as it may sound, were permitted to indulge in play-acting, in which Margaret had a peculiar facility. To help the illusion they were allowed to heighten the natural colour of the face, but Margaret did not observe the unity of time and place in respect of the rouge; she employed it at unseasonable times. The pleasantry arose out of that, and was followed by the turbulence of conduct on Margaret's part which "somewhat puzzled" her teachers, as it would not have puzzled the

judges of Salem. Mrs. Howe further notes that, during the progress of the affair, "Margaret's pride did not forsake her, she summoned to her aid the fortitude of her Romans, and ate her dinner quietly," though she afterwards conducted herself in a wholly Gallic fashion.

Fortunately the pupil was dealt with by a teacher who wrought upon her by narrating the circumstances of her own life which had made it one of sorrow and sacrifice, a common enough practice, I believe, amongst governesses, but one would dearly love to know the secret story of this New England school teacher. At any rate Margaret left the school at the age of thirteen and returned to her father's house, "much instructed in the conditions of harmonious relations with her fellows," qualities very essential to peaceable living in the Cambridgeport of those days.

Margaret, as her friends called her, omitting the first name Sarah—they called Emerson, Waldo,—returned from school at the end of her thirteenth year. Dr. Henry F. Hedge, whose one sufficient claim upon our notice is that he was her friend, gives us a lively picture of her at this time. He was a student at Harvard; allowance must be made for that, as students at Harvard, or any other college for the matter of that, must not be followed absolutely in their estimation of a feminine personality.

According to this authority, her precocity, mental, and physical, he also notes, was such that she passed for a much older person and had already a recognized place in society. She was in blooming and vigorous health, with a tendency to over-stoutness, which he thinks gave her some trouble, though he does not specify quite in what way. She was not handsome, not even pretty, he admits, but we all know the combination of feminine features and qualities which college students consider handsome and pretty. She had fine hair and teeth, he adds with discrimination, and a peculiarly graceful carriage of the head and neck which redeemed her from the charge of plainness. Sixteen years afterwards this same neck seems to have impressed Mr. Channing, who dwells with much feeling upon its pliancy and other qualities; "in moments of tender and pensive feeling its curves were like those of a swan; under the influence of indignation its movements were more like the swooping of a bird of prey." He mentions a habit of opening the eyes and fluttering them suddenly with a singular dilatation of the iris, which must have deepened this impression of her likeness to a bird. Nor are we left without Emerson's observations upon her appearance: "She had a face and frame that would indicate fulness and tenacity of life"—the philosophers of those days were hard bitten with phrenology. "She was then as always carefully and becomingly dressed, and of lady-like self

possession. For the rest, her appearance had nothing prepossessing. Her extreme plainness, a trick of incessantly opening and shutting her eyelids, the nasal tone of her voice, all repelled. Soon her wit effaced the impression of her unattractiveness, and the eyes which were so plain at first, swam with fun and drollery." This was in 1836. She was in her twenty-seventh year, he was thirty-three—these facts are worth noting—but in Mrs. Howe's judgement, "Emerson's bane was a want of fusion, the ruling characteristic of Mr. Channing, a heart that melted almost too easily."

Miss Fuller's studies did not cease upon her being admitted as a recognized member of Cambridgeport society. Her "pursuit of culture" was ardent, and she was resolute to track it to its lair. She rose before five, walked for an hour, practised on the piano till seven, had breakfast, read French till eight, then attended two or three lectures in Brown's philosophy. At half-past nine she went to Mr. Perkin's school and studied Greek till twelve, when she went home and practised on the piano till two. If the conversation were very agreeable she sometimes lounged for half an hour at dessert, though rarely so lavish of time. Then, when she could, she read two hours in Italian; at six she walked or drove, and sang for half an hour before retiring for a little while to write in her journal. This is doubtless what she intended to do; but as Sir James Fitzjames Stephen observed, "you cannot always infer from the statement of the fact to the truth of it."

It is true, however, that Miss Fuller was engaged in serious study. Moved by the brilliant expositions of Carlyle, she commenced the study of German, and within a year had read Goethe, Schiller, Tieck, Koerner, Richter and Novalis,—fine sounding names. She was able to appreciate "the imperfection of Novalis, and the shallowness of Lessing." She thought him "easily followed, strong, but not deep." Impressed with the value of a fixed opinion on the subject of metaphysics she applied herself to the study of Fichte, Stuart and Brown—the Scotch schoolmaster who attempted to fill in with hollow rhetoric the gulf between youth and Presbyterianism. This ambitious young woman, after a year's study of German in New England, entertained the idea of writing a life of Goethe and constructing six historical tragedies, which would have been a fairly marvellous production. In spite of all this employment she continued to feel "a merciful and providential interest in her friends."

At twenty-one years of age this strange person found "the past worthless, the future hopeless." The occasion of this discovery was Thanksgiving Day, the place, church. After dinner the outlook was rather more gloomy, and she sought to free herself from anguish by a

long quick walk. This was a thoroughly sound physiological proceeding, and she hoped to return home in a state of prayer. Luther in a similar case had recourse to a draught of strong sweet wine. It was a sad and sallow day, and, driven from place to place by the conflict within her, she sat down at last to rest beside a little pool, dark and silent within the trees. This must have been about five in the afternoon; dinner was at two; we all feel that way at times, but if we are wise we do not speak of it. Suddenly the sun broke through the clouds, and "the inward conquest was sealed by the sunbeam of that sallow day." Then she saw "there was no self, that it was only because she thought self real, that she suffered, that she had only to live in the idea of the all, and all was hers." This sounds very familiar in our ears.

Two years later, in 1833, Margaret Fuller and her family, in the false language of the period, "exchanged the academic shades of Cambridgeport for the country retirement of Groton,"—Mr. Higginson himself speaks of Artichoke Mills on the Merrimac as "a delicious land of lotos-eating." She did not, we are glad to learn, take the position of a malcontent, but busied herself in teaching her brothers and sisters, in needlework, and in assisting her mother, a thoroughly useful occupation. But soon we find her at a careful perusal of Alfieri's writings and an examination into the evidence of Christianity, for it would appear that infidels and deists, some of whom were numbered among her friends, had instilled into her mind distressing sceptical notions. It will be observed that they were deists and not atheists who poisoned this young New England mind.

It was during this period that Margaret Fuller met Miss Harriet Martineau, and the stranger appears to have been rather free in her remarks, for we have it on record that her depreciation of Hannah More grated on Miss Fuller's sensibilities. The two ladies went to church together, and the minister gave them the distinction of being prayed for. This induced Margaret herself to utter a prayer which she afterwards committed to writing, though the uttering of it may have been a dramatic after-thought. Some persons affect to question the efficacy of the minister's prayer, for one of the persons to whom it was addressed became in time an "enthusiastic disbeliever." This imputed unrighteousness, however, occurred after the publication of Miss Martineau's book, *Society in America*, in 1836. In this work, as well as in her autobiography, she indulged in some tolerably plain speaking. She sets it down for a fact that she found the coterie in Boston occupied in talk about fanciful and shallow conceits which they took for philosophy, and that Miss Fuller was spoiling a set of well-meaning women, by looking down upon people who acted instead of talking finely. However this may be,

we have Margaret's opinion of the book in an " immense " letter addressed to its author, in which she tells her she found in it a degree of presumptuousness, irreverence, inaccuracy, hasty generalization, ultraism and many other evil things. Ten years later the ladies met again, but no heat appears to have been developed. It was to Miss Martineau that the young lady was indebted for an introduction to Emerson, " whom she very much wished to know," and all three became very good friends. Emerson speaks of his impression of these early interviews with a polite reserve, as if he were writing a letter of commendation for a friend whom he wished to be rid of. " I believe I fancied her too much interested in personal history, and dramatic justice was done to everybody's foible." It is pretty hard to take any comfort out of that, yet again he insists " that her good services were somewhat impaired by a self-esteem which it would have been unfortunate for the disciples to imitate." It is feared that those disciples were not deterred by this gentle remonstrance from manifestations of self-esteem. It was unfortunate, but then Emerson had already laid himself open to the charge of " a want of fusion."

In the autumn of 1835 the father, Timothy Fuller, died, leaving his property " somewhat diminished," as many a worse man has done. If it were the present intention to deal with that heroic period in the world's history, of which the Puritan development in New England formed a part, especially dwelling upon the strength and splendour of character therein displayed, we could not do better than follow the fortunes of the Fuller family up to its source. The origin of the family, in America at least, was in Lieutenant Thomas Fuller who came over in 1638. We have his own word for it in verse:

" In thirty-eight I set my foot
On this New England shore,
My thoughts were then to stay one year,
And here remain no more."

The great-grandson of this Lieutenant and poet was Timothy Fuller, and the eldest son of this Timothy was another of the same name, the father of Margaret. Miss Fuller's grandfather graduated, or was graduated as it was the fashion of that time to say, from Harvard College in 1760, and settled in Princeton (Massachusetts) as a clergyman.

It is the custom to suppose that the events culminating in the American Revolution were of an entirely spontaneous origin. As a matter of fact there was much contention, much bitterness, and there were many opponents of extreme measures. This clergyman was a firm opponent, and on the occasion of taking up arms he addressed his parishioners

from a text, which is susceptible of much vindictiveness in the handling. As a result he was dismissed from his charge, and he brought suit to recover his salary. The affair appears to have been adjusted, for we find him once more in his pastorate, but recalcitrant as ever, voting in the State Convention against the acceptance of the Constitution for the United Colonies, on the ground that that Instrument did not define the relation of human slavery to free institutions. Some will consider this old Puritan a far-seeing man. His five sons were all lawyers, and so far as one can judge did not attain to any great eminence for winsomeness of nature or agreeableness of behaviour. It would appear that Margaret inherited some of those qualities which are not designed to win the public heart; indeed, one observer, himself a man of intemperate speech, thought he found in her "the disagreeableness of forty Fullers."

Margaret's father was the eldest of these five lawyers, not to designate them by so humane a name as sons, and he must have been a person of some consideration. He was, of course, a graduate of Harvard. He was a representative in Congress, Chairman of the Committee on Naval Affairs, and an intimate friend of John Quincy Adams. Indeed, the President visited Mr. Fuller and was present at a dinner and ball given in his honour. At this time Mr. Fuller lived in the fine old house built by Chief Justice Dana, and, what is of more interest to us, this was the occasion of his daughter's first public appearance.

To show how faithfully the field has been gleaned, we are not left without an exact account of the figure which the young lady made at this ball. She is described as a young girl of sixteen, with a very plain face, half shut eyes and hair curled all over her head. She was laced so tightly that she had to hold her arms back as if they were pinioned. Her dress was of pink silk with muslin over it, low in the neck and badly cut. She danced awkwardly, and was so shortsighted that she could hardly see her partner. It will appear at once that this description is by another young lady, and, therefore, that the reporter's contemporary was of an attractive personality.

The Fullers did not long occupy this mansion, but made several moves before retiring to Groton in 1833, where the father died two years later. The consequent family cares prevented the daughter's acceptance of a proposition made to her by Mr. Farrar, professor of astronomy at Harvard, and his wife, to visit Europe in company with Miss Martineau. Margaret prayed that she might make a right decision, an operation wholly needless, one would think, as the answer was so obvious from her resources. In the pious enquiry of one of her admirers: "Of all the crownings of Margaret's life, shall we not most envy her that of this act of sacrifice?" one finds a revelation of the meretricious surroundings

in which she lived—as meretricious as the surroundings in which Mark Pattison lived at the same time, when Oxford also was overtaken by folly.

In 1836 the young woman went to Boston under engagement with Mr. A. Bronson Alcott to teach Latin and French in his school. To these languages she added Italian and German. One would think from the published accounts that she had the gift of tongues, and was able to confer it upon her pupils, a gift of doubtful utility where women are concerned, as a wise old Puritan observed in the bitterness of his spirit, during the troubled time when Mrs. Hutchinson was turning the world upside down. One young woman maliciously circulated the report that their teacher thought in German. Yet when Miss Fuller went to Paris she "might as usefully have been in a well" for all the good her French did her. When she met her Italian husband in Rome, she could only exchange a few guide-book words; six months after that meeting she still "spoke very bad French fluently." When she called upon George Sand, that lady greeted her with the familiar—"C'est vous!" Miss Fuller replied, "Il me fait de bien de vous voir," which is bad French but amusing. Her biographers are careful to alter the expression to "Il me fait du bien de vous voir," which is better; but the incident illustrates their incapacity to tell of a thing as it occurred and their uncontrollable desire to exaggerate.

It appears that there were "worldlings" in Boston in those days and that they held Mr. Alcott in as much honour "as the worldlings of ancient Athens did Socrates." It "made them smile" to hear their verdict confirmed by Miss Martineau from the other side of the Atlantic; hence the vigour of speech in the letter condemning her book. Mr. Alcott appears to have had his own troubles. There was a serious proposition to prosecute him for blasphemy, and on the appearance of his book, *Conversations on the Gospels,* a professor of Harvard is quoted as affirming that one-third of it was absurd, one-third blasphemous, and one-third obscene. In a very short time, this famous school contained only five pupils, three of them Mr. Alcott's daughters, a coloured child and one other. Miss Fuller's labours as a teacher in Boston were at an end, so she went to Providence to teach in Colonel Potter's school. Her salary was to be a thousand dollars, but there is some question as to whether it was ever paid. Miss Fuller remained in Providence two years, and during that time made the acquaintance of many persons whose names we know, amongst them Richard Henry Dana, and his son who had just returned from his wanderings over the sea. Colonel Fuller, who was no relation of Margaret, shortly afterwards went to New York on the staff of the *Mirror,* then conducted by N. P. Willis and George P.

Morris, but he did not remain long, as he "got tired of supporting two poets." In those days, it would appear, newspapers were conducted by men of literary taste, and this course seemed as natural to the readers, as that a ship should be commanded by a sea-captain.

All these volumes of memoirs, reminiscences, letters and diaries, and even these present writings, may seem a great thing about a very small matter, for we have not yet heard one word of sense from Margaret Fuller herself. But this is part of the enigma. If you ask her biographers wherein consisted the capacity of this woman, they will answer with one accord: "in her conversations," a statement obviously difficult to disprove at this distance of time. The converse of the Platonic proposition, that ideas are inseparable from speech, is not universally true, and we cannot now say what was the ratio of ideas to words. Certainly there was a great deal of speech. All authorities agree upon that, though Miss Martineau for one did not attach any high value to it. Dr. Hedge, one of Miss Fuller's earliest admirers, remarked upon her conversation, "brilliant and full of interest, but with a satirical turn, which became somewhat modified in after life." Mr. Clarke bears the same testimony, but admits that she was haughty and supercilious to what he calls the multitude, and attributes this to her being "intensive" rather than "extensive," though this explanation does not advance our enquiry very far. Strangers, we are further told, were wary of her on account of a haunting fear of being reduced to an absurdity. For all these reasons we must infer that her talk was interesting to the immediate circle of her friends.

When Miss Fuller returned from Providence, she decided to turn to account her ability to talk, and in 1839 began her celebrated Conversations in Miss Peabody's rooms, West Street, Boston. She talked for five years, not without intermissions, of course, but that was her principal occupation till she left New England. "Unfortunately," as Mrs. Howe judged, "the pulpit and the platform were interdicted to her sex, but here was an opportunity to arouse women from their prone and slavish attitude." At the first meeting twenty-five ladies were present "who showed themselves to be of the elect by their own election of a noble aim,"—Unitarian doctrine truly, Arianism, Socinianism, for less than which men—and women too—had been hanged in that very Boston. The first Conversation was devoted to Mythology, as being sufficiently separated from all exciting local subjects; but it is hard to say what subjects might not have excited the Boston of those days; it became excited over less.

In spite of the evidence of direct observers to the contrary, Margaret Fuller is said to have appeared positively beautiful in her chair of leader-

ship; even her dress was glorified, although it was known to have been characterized by no display or attempted effect. However that may have been, it is certain these people could not see clearly, for we are asked to credit the statement that twenty-five Boston ladies of the year 1840 "seemed melted into one love." In addition to the meetings for ladies, there was a series of five meetings to which "gentlemen" were admitted. Mr. Emerson was present at one of them, and he testifies that it was encumbered by the headiness or incapacity of the men.

These happy labours continued for six winters, and came to an end in April, 1844, but in the meantime they had not consumed all of Miss Fuller's energy. She was actively engaged in the study of Art. The masters of Art were studied by means of casts in the Boston Athenæum, in a collection of Allston's paintings and some sculptures of Greenough and Crawford. Upon these rather fragmentary data she appears to have attained to some finality of opinion, though, according to Emerson, a certain fanciful interpretation of her own sometimes took the place of a just estimate of artistic values. If the Boston of those days was less rich in art treasures than it is now, we have it on high authority that it was "richer in the intellectual form of appreciative criticisms." It may be so; one of their own has said it. At any rate Emerson considered that Miss Fuller's taste in Art was not based on universal but on idiosyncratic grounds. No one blames the young woman for being so foolish, but the people around her must have been extremely foolish to listen to and to praise her. And so she lived surrounded by flatterers, and the most subtle flattery of a woman is that which is addressed to her intellect, because it helps to allay the suspicion that she has none.

There are but two incidents yet to relate before emerging into the air. The one is Miss Fuller's editorship of the *Dial*; the other, her connexion with Brook Farm. The painter Newton made the remark that in London he met occasionally such society as he met in Boston all the time, which in itself is a dark saying, but at any rate it was necessary that these friends should have an organ of printed speech. As Leigh Hunt said of one of the fraternity, they were wavering between something and nothing, and now they looked for permanency in the *Dial*. This Journal appeared in 1840, and was issued at intervals, more or less regular, for four years. Good or bad it cost a good deal of precious time from those who served it, and from Margaret most of all—that was Emerson's view of the publication. The idea of a journal was promoted by the appearance in England of the *New Monthly Magazine*, whose editor, Heraud, is described by Carlyle as "a loquacious, scribacious little man of middle age and a parboiled greasy aspect."

The *Dial* then was the organ of the Transcendentalists—the word would slip out at last; the meaning of it is that their utterances had passed beyond the limits of good sense—and as such it is a treasury of information, containing as it does, work fresh from the hand of Emerson, Lowell, Thoreau, Cranch, the Channings, Alcott and Garrison, upon such subjects as *The Interior of the Hidden Life, The Outworld and the Inworld,* and many other large subjects, which we do not now comprehend. It would appear that even in those days of enlightenment there were some who cared for none of these things, and the editor of the *Philadelphia Gazette* so far forgot himself as to call the writers a pack of zanies, and to apply to them other opprobrious epithets of plainer meaning.

Those were curious times; men were full of hope and everybody had a gospel of his own. Graham preached the regeneration of the world through the medium of unbolted flour, and we have not yet freed ourselves from the heresy; Alcott preached a "potato" gospel, and Palmer re-discovered the source of evil to be not in the love of money, but in money itself. A strange fruit of the materialism of their doctrine is found in the fact that the best reward they held out was a long life, as if that in itself were a wholly desirable thing.

It is easy at this distance of time to speak of that ingenious experiment in altruism, known as Brook Farm, with calmness and understanding. It was an innocent form of folly and the motives of the associates were wholly good. These extremely speculative persons manifested a pure and fresh spirit, and an unquestioning faith in the regeneration of men, qualities excellent in themselves, but the leaven was very little and its force soon spent. Including the preliminary period of talk, the whole fanciful affair only lasted some four or five years, and then vanished into the void with other good and aimless intentions. There was abundant enthusiasm and amiability, qualities one may see in a company of otherwise serious minded men riding through the streets of a western town on the backs of camels with strange banners in their hands, but, as Mr. James observes, there were degrees of enthusiasm and there must have been degrees of amiability too. The failure of the experiment arose from the nature of the case. J. G. Holland, who was one of them, wrote:—

> "We hope, we resolve, we aspire, we pray,
> And we think we mount the air on wings
> Beyond the recall of sensual things,
> Whilst our feet still cling to the heavy clay."

Precisely; this is not very good poetry, but it is good sense. Their feet too were in the clay.

The people who composed the Brook Farm community were for the most part insignificant. Emerson was gently sarcastic and mildly critical throughout. In the cloud of talk we hear his voice: "truly it is not instruction, but provocation I can receive from another soul." Hawthorne gloomed in a corner for hours at a time, holding a book before him, but seldom turning the leaves. His companions accused him of coming to the place as a sort of vampire for purely psychological purposes. His attitude is revealed in one of his notes: "I was invited to dine with Miss Margaret Fuller, but Providence had given me some business to do, for which I was very thankful." Even Margaret herself thought that one of the best things about the Farm was its nearness to the woods, and escape so easy; she was sagacious enough to observe a "great tendency to advocate spontaneousness at the expense of reflection." A curious way in which this spontaneousness revealed itself was in designating the cows by the names of the inmates. Margaret felt the evils of want of conventional refinement in the impudence with which one of the girls treated her. This same young woman, however, afterwards was brought to see the enormity of her offence and on the following Saturday as Margaret was leaving, "she stood waiting with a timid air" to bid her good-bye. On another occasion she observed a "lack of the deference she needed for the boldness and animation of her part, and so did not speak with as much force as usual."

The movement illustrates well the vagaries of philosophic speculation. No one can tell whither it leads or where it will end if it be allowed free play. It would be long to trace the origin of the movement, for its ways were long and devious. It is sufficient to say that it came from France, through Fourier, who in turn derived his inspiration from Rousseau, and he in turn from Locke and his school, but that is far enough.

In England, when the speculation had reached a certain point and the conclusion was seen to be logically inevitable, the common sense of the English mind came to the rescue. The people perceived that the course of life can never be determined by *a priori* reasoning. In France the doctrinaires gained control and were determined to push their reasoning to a conclusion. The issue was the entirely logical Revolution and they accepted it, just as the Calvinist accepts hell. Their great cry was "Return to Nature," but it was modified by the German voice and modulated by some suggestions of Hellenism before it came across to New England as a faint echo.

There was a new spirit in the air. In England people had turned aside and applied themselves to the amendment of their lives after the method of Wesley; in America its results were seen temporarily and perhaps accidentally in the clouds of transcendentalism, if that be not too

formidable a word to employ, but finally in the humanizing results of the great Unitarian movement.

Margaret Fuller herself was quick enough to perceive that Fourierism was entirely materialistic in motive and aim, "making the soul the result of bodily health, instead of body the mere clothing of the soul." It is not by any material thing that either the individual or the mass will be altered for the better.

But, after all, is Nature only Nature as seen on a rare day in June in the sweet fields and woods of New England? Is it not to be looked for also when we lift up our eyes to the mountains scarred by catastrophe or seamed by the frosts of winter and proclaiming the effect of the slow invulnerable forces that make for disintegration and decay? If those who carried this cry farthest had ears to hear, and had listened on the sweetest evening, they would have heard the rustle of the viper in the dead leaves, the stealthy tread of some small beast of prey relentlessly pursuing a smaller beast; they would have heard the cry of the hunted and the anguished scream of the death agony. The very wood of West Roxbury was a world of plunder and death; Nature there too was one with rapine; the Mayfly was torn by the swallow; the sparrow speared by the shrike—that is, if shrikes inhabit New England in June.

It is only in semi-rural communities that there is a desire to escape further from civilization. Zola knew the soil and what it brings forth,—squalor and brutality. Nature worship is as false a religion as the worship of any other material thing. It is Ashtoreth in another guise, save that amongst the Brook farmers the false worship was not in the slightest degree associated with sexual immorality, and that was the only strange thing about it. Yet, platonic love is always silly, and sometimes it is dangerous, according to the judicious observation of the master of Peterhouse. Not since the days of the Assyrian King have men become sane by being turned out to grass, and those who talk of the regeneration of the race through Nature, "talk as a bull would talk." We have Johnson's word for that.

These people attempted to realize Dryden's dream of an early age, "when wild in woods the noble savage ran," or in reality as Mr. Bagehot prefers it, "when lone in woods the cringing savage crept." Emerson tried to teach them that heroism lies in doing the daily work. Innes afterwards proclaimed that beauty is in the meadow and the woodland of the back lot, as he had learned from Rousseau, Dupré, Daubigny and Millet, that the *paysage intime* contains that beauty which we are all prone to go far to seek. Innes was always protesting that "rivers, streams, the rippling brook, the hillside, the sky and the clouds can only

convey their sentiment to those who are in the love of God and the desire of the truth."

The Transcendentalists of New England had those two qualities, love of God and love of the truth, and any Calvinist could tell where they obtained them. Certainly it was not in West Roxbury. And yet to this day these devotees are unthinkingly held up to our admiration,—men who declined the duties of everyday life, who, like the melancholy Democritus, "forsook the city, lived in groves and hollow trees upon a green bank of a brook side or confluence or waters all day long and all night." They saw the evil that is in the world as clearly as we see it, but they thought there was a remedy in exchanging the old physicians for new quacks. We know there is none, save that which comes in the ordinary course of events.

It must not be supposed that Margaret Fuller and her friends had it all their own way. The American public saw to that. There was humour in the land then as now and there was common sense. The little coterie made a large noise and their successors took up its echoes, but it must not be inferred that the voice of the men of common sense was either still or small. They met with neglect and ridicule; Cranch made caricatures; Lowell wrote doggerel. One of his stanzas in *Fables for Critics* thus describes Margaret Fuller under the guise of Miranda:—

> "She will take an old notion and make it her own
> By saying it o'er in her sibylline tone;
> Or persuade you 'tis something tremendously deep
> By repeating it so as to put you to sleep;
> And she well may defy any mortal to see through it
> When once she has mixed up her infinite Me through it."

In short then, Margaret Fuller became, in the minds of sensible people, the watchword for all that was eccentric and pretentious, the embodiment of all that was ungraceful and unfeminine; yet if any of these scoffers thought Margaret Fuller a fool, he was vastly mistaken, though there was something to be said for that view of the case; if he arrived at the same conclusion in respect of her friends, who fostered all this folly, this is not the place to contradict him.

In 1844 Margaret Fuller went to New York. She seems to have had her eyes opened to the futility of the life in Boston. In a letter to a friend written not long before the change, she confessed she had "gabbled and simpered long enough;" but we do not know if the confession was made with as much sincerity as the occasion demanded. The immediate cause of her departure was an engagement with Horace

Greeley to join the staff of the *Tribune,* and she lived in his house so long as she remained in the United States. There is a fact to quiet mirth. Horace Greeley knew merit when he saw it. He knew good work and good writing, and his opinions upon the members of his staff were always full of matter. He has left it on record that the new contributor won his favour by her solid merit, by her terse and vigorous writing. At first their relation was one of friendly antagonism. Mr. Greeley himself tells us so, and that he kept his eye clear, resolute to resist the fascination, he had heard, she exercised over her former friends. On her side she considered her employer "a man of plebeian habits but with a noble heart, his abilities in his own way great, and believing in hers to a surprising extent." Therefore, they became great friends. After three years she was the one to whom Mr. Greeley wrote when his little boy died: "Ah, Margaret, the world grows dark with us; you grieve, for Rome has fallen; I mourn, for Pickie is dead."

Miss Fuller was placed in charge of the literary department of the *Tribune,* and whilst she held sway in that office she had occasion to deal with the writings, then coming out in rapid succession, of Emerson, Lowell, Browning, Elizabeth Barrett, Carlyle, George Sand, and it is in her critical analysis of them that she first reveals her power. One or two illustrations of her method will be enough.

An illustrated edition of Mr. Longfellow's poems had just appeared and it was reviewed by her. It is easy enough now to say and to see what she then saw and said, but it demanded insight to see and courage to say what was entirely missed by that generation. "Longfellow is artificial and imitative. He borrows incessantly and mixes what he borrows, so that it has a hollow, second-hand sound. He has a love of the beautiful and a fancy for what is large and manly if not a full sympathy with it. His verse breathes at times much sweetness, and though imitative he is not mechanical. Nature with him, whether human or external, is always seen through the windows of literature."

Lowell got his dose too: "He is absolutely wanting in the true spirit and tone of poesy. His interest in the moral questions of the day has supplied the want of vitality in himself. His great facility at versification has enabled him to fill the ear with a copious stream of pleasant sound." There are fables for poets as well as fables for critics.

Browning is introduced to the American public for the first time in *Bells and Pomegranates,* and with singular fitness the reviewer was compelled to send to Boston for his poems as they could not be obtained in New York. Miss Fuller recognized at once in Miss Barrett's poetry "vigour and nobleness of conception, depth of spiritual experience and

command of classic allusion, the vision of a great poet but little of his power."

George Sand was at that time at the height of her fame, to some the female incarnation of evil, to others an inspired prophetess, but this Yankee woman was not deceived. "George Sand smokes, wears male attire, wishes to be addressed as *mon frère*. Perhaps if she found those who were as brothers indeed, she would not care whether she were brother or sister. Those who would reform the world must show that they do not speak in the heat of wild impulse; their lives must be unstained by passionate error, if they would not confound the fancies of a day with the requisitions of eternal good." Margaret Fuller was right. The world is yet unreformed and it is not by George Sands or George Eliots the work will be done.

About this time too appeared the *Women in the Nineteenth Century*. The edition was sold in a week, and eighty-five dollars was handed to her as her share. "This was a most speaking fact;" that she could hear the voice, speaks for her growing sense. The book enlarged her reputation and made her name known abroad. It proclaimed her opinion of the capacity of women for a wide activity and demanded an outlet for it. "Let them be sea-captains if they will."

But her most formal work was a series of papers on American Art and Literature. In the outset she sets herself right by disarming "critics who may accuse her of writing about a thing that does not exist." She accords to Prescott industry, the choice of valuable material, the power of clear arrangement with an absence of thought; to Bancroft, leading thoughts by whose aid he groups his facts. There is the true doctrine of history. Bryant is placed at the head of the poets, though his genius is "neither fertile nor comprehensive." Irving, Cooper and Miss Sedgwick are spoken of with "characteristic appreciation," and finally, the Magazine itself comes in for its share. "The style of story current in them is flimsy beyond any texture that was spun or dreamed of by the mind of man." It would be interesting to have her opinion of Hawthorne, who it will be remembered declined at one time to dine with her at Mr. Bancroft's house.

The way this young woman talks back at Carlyle proves her courage, good sense and insight. "We shall not be sneered or stormed at," she says, and that too at the time when Carlyle was yet alive. "If he has become interested in Oliver or any other pet hyena, by studying his habits, is that any reason why we should admit him to our Pantheon? He rails himself out of breath at the short-sighted and yet sees scarce a step before him."

Of Alfred de Vigny, she says: "To see and to tell with grace, often

with dignity and pathos, what he sees, is his proper vocation;" of Béranger, "his wit is too truly French in its lightness and sparkling feathery vivacity, that one like me, accustomed to the bitterness of English tonics and Byronic wrath of satire, cannot appreciate him at once." Nor did Miss Fuller disdain poetry on her own account. Some of it is as good as some of George Eliot's, though this latter writer does not usually pack into a sonnet line more feet than the law demands, a matter about which Miss Fuller was not so particular.

All this is good criticism, strong and keen, and its author cannot have been the absurd creature her glorifiers would have us believe. Even in New York they could not leave her alone. She was not allowed to visit Blackwell's Island without "shedding the balm of her presence upon the hardened and wretched inmates, because she came like the great powers of nature harmonizing with all the beauty of the soul or of the earth." This of course is rubbish. What these people said about their own inward state may have seemed to them true enough; they were incapable of telling the truth about the common things of which truth can be told.

Now that we know the nature of the person with whom we are dealing, we shall be able to estimate the value of the words which she employs. Words depend for their meaning upon the one who uses them. When Carlyle said remorse, he meant regret; when his wife spoke of the cruelties she endured, she merely referred to the ordinary inconveniences of the married state. Victor Hugo described Sainte-Beuve as an eagle and a royal meteor; but in France all writers are masters and those who attain to any distinction are immortal. We find Tennyson charging his niece to reveal to the world how great a sacrifice he made, when at length he placed on his head the coronet which had been thrice pressed upon him and twice put away. Artists in colours are incapable of representing with truthfulness the things which anyone can see. Artists in words, as a rule, are unable to tell of a thing as it occurred, unless it be Thomas Campbell, who alone is remarkable for his fidelity to fact, as in his relation in verse of the foundering of a troopship. But when a literary artist attempts to reproduce in words his own mental processes, then it is obviously very hard to contradict him.

Margaret Fuller set down on paper a relation of the impressions made upon her mind by a man; which is to say, she wrote a series of documents known as love-letters. Fortunately most persons pass through that stage before they have attained to the power of expression, and the emotion expends itself in sighs, in secret verse, and in tossings to and fro. But she had arrived at complete fluency and produced a

volume of correspondence which is peculiarly near being nonsense. The letters are addressed to a Hamburg Jew, Nathan by name, who died not many years ago, and they have only recently been made public, though their existence has always been known to those who were interested in such matters. One example will serve to show the inconvenience of experiencing the passion after the glory of youth is fled, or at any rate the folly of simulating it in the maturity of life. The Hebrew lover disappointed the lady by not coming to a concert of music at Horace Greeley's house and the next day he received the following letter:—

"The shades and time of evening settled down upon me as dew upon the earth. You came not—And now I realise that soon will be the time when evening will come always, but you will come no more. We shall meet in soul—but the living eye of love, that is in itself almost a soul, that will beam no more. O Heaven, O God, or by whatsoever name I may appeal, surely, surely, Oh! All Causing, thou must be all sustaining, all fulfilling too. I, from thee sprung, do not feel forced to bear so much as one of these deep impulses in vain. Nor is it enough that the heavenly magic of its touch throws open all the treasure chambers of the universe if these enchanted doors must close again. Wilt thou prepare for me an image fair and grand enough of hope? Give that to man at large, but to me send some little talisman that may influence the secret heart. And let it have a diamond point that may pierce without any throb swells. I would not stifle one single note, only tune all sweet. My heart aches still and I must lean it on the paper as I write, so the writing goes all amiss."

At that very moment the fascinating Jew was preparing to sail for Germany.

In 1846 Miss Fuller accomplished her desire to visit Europe. She sailed from New York on the old *Cambria* of the Cunard Line. Her biographer still pursues her and finds her upon the moment of landing in Liverpool paying a visit to the Mechanics' Institute and afterwards "expressing appreciation of the British Museum." The casts in the Boston Athenæum, about which we have heard so much, loomed large in those days.

The traveller visited Wordsworth at his home, and found "a reverend old man, clothed in black and walking with cautious step along the level garden path." She met Dean Milman at the Martineaus, Dr. Chalmers and DeQuincey in Edinburgh, and there saw the portrait of "hateful old John Knox and his wife who was like him."

During an excursion to the Highlands, Miss Fuller had a misadventure and passed the night on the hills in a Scottish mist and was none the worse for it. This would appear to dispose of the fiction of

her frail health. Returning to England she was soon installed in London; it was the London, and those were the days, of Dickens, Thackeray, Sydney Smith, Moore, Lord Brougham, the Duke of Wellington and Carlyle.

Miss Fuller began in a small way by visiting Joanna Baillie, and then felt competent to present her letter of introduction from Emerson to Carlyle. It does not matter now what Margaret thought of Carlyle, though she did say two or three things that seem very probable; it matters a great deal towards our enquiry what Carlyle thought of her, for he had some knowledge of women and knew a fool when he saw one. He has put it on record that he and Mrs. Carlyle held Miss Fuller in real regard, that he found in her papers "something greatly superior to all I knew before, in fact, the undeniable utterances (now first undeniable to me) of a true heroic mind, altogether unique as far as I know among the writing women of this generation, rare enough too, God knows, among the writing men. She is very narrow sometimes, but she is truly high. Honour to Margaret and more and more speed to her." Honour to Margaret, to the real Margaret, not the ridiculous *précieuse* of the New England coterie.

Two other persons she knew before going to Paris, Mazzini, intimately; and casually, "a witty French flippant sort of a man, who told stories admirably and served a good purpose by interrupting Carlyle's harangues." This could be none other than George Henry Lewes. The meeting with Mazzini was a fateful one for her.

In Paris Miss Fuller was not unknown, for translations of her social studies had appeared in the *Revue Indépendante*. She was at once taken up by George Sand, and introduced to Chopin, with whom that illustrious moralist had formed an "alliance"—that, Sir Leslie Stephen believed to be the correct word to employ in such cases. The great musician played to her, and Mickiewicz talked to her whilst the music was going on. She heard the debates in the Assembly and saw the Queen at a ball; also Leverrier, the discoverer of Neptune, "wandering about as if he had lost, not found, a planet." That is what might be called "smart." From all this it will appear that Miss Fuller was a person of some consideration in the highest literary circles of Europe. But we must not overrate the importance of this. Literary people, as a rule, are ignorant of many things, and easily swayed one way or the other by influences of slight force. It may have been that they were carried away by wonder, not that Margaret Fuller could write so well, but that this outland stranger of unprepossessing appearance and nasal voice was a woman and could write at all—like Dr. Johnson when he saw the dancing bear.

In May, 1847, Margaret Fuller arrived in Rome, having come by way of Marseilles, Genoa and Naples. There she remained two months and then proceeded northward by way of Perugia, Florence, Ravenna and Venice to Milan. From that place she visited the Italian lakes, went on to Switzerland, and returned to Milan early in September, and to Rome by way of Florence near the end of October. At Lake Como she enjoyed the society of the Marchesa Arconati Visconti, whom she had previously met in Florence. The impression she made upon the accomplished Italian is recorded in a letter from that lady to Emerson:

"Je n'ai point rencontré, dans ma vie, de femme plus noble; ayant autant de sympathie pour ses semblables, et dont l'esprit fut plus vivifiant. Je me suis tout de suite sentie attirée par elle. Quand je fis sa connaissance, j'ignorais que ce fut une femme remarquable."

Though Miss Fuller was now in Italy less than half a year, and that spent mostly in travelling, she had already gained the complete confidence and esteem of Young Italy, the revolutionary party, whose watchword was the unification of the Italian States into a Republic. This intimacy was but natural, for a strong bond of sympathy had been established between her and Mazzini in London. Being interested in ideas herself, she enjoyed the company of these young radicals, and as she belonged to a republic, and as a republic was believed to have something to do with liberty, they had much in common. Inasmuch as Miss Fuller's future was afterwards bound up with theirs, and as out of this union arose the tragedy of her life, it will be necessary to indicate briefly the posture of public affairs.

At the collapse of the fabric which Napoleon had so painfully reared, the little Italian sovereigns returned from their exile more resolute than ever in tyranny, with Austria approving of their reign of terror. Tyranny was met with conspiracy, and revolt with vengeance. This state of affairs lasted till 1847. Most men were agreed that a change must come; there was no agreement as to what that change should be. Italy must be unified; one party was for unity under republican forms, another party was in favour of a limited monarchy. Mazzini was for a republic, Cavour and Garibaldi put their trust in a king. The faith of Cavour and Garibaldi was afterwards justified, but only through much shedding of blood. The Revolution in France, which drove Louis Philippe from the throne, in February, 1848, encouraged Mazzini and his friends. Some months previously the miracle of all miracles had happened; a gleam of political sense emanated from the Papal throne. Pius IX. declared himself a liberal; he proclaimed a political amnesty; he organized a national guard and began to form a constitution for the Roman State.

Things looked promising for Mazzini and his friends, and Margaret Fuller was of their number. Another of her friends was the Marchese Ossoli, a young Roman of twenty-eight, of a noble but impoverished house. In less than two months the Pope had fled from Rome and was breathing out threats of excommunication against his recent allies. In February, 1849, Rome was declared a Republic under three dictators, with Mazzini at their head. A few days later the dictator escaped on board a British warship; in April, the French were at the gates of Rome, and after a successful assault held the city for the Pope. The dream was at an end. Margaret Fuller had "played for a new stake and lost it." That was her view of the case as contained in a letter to Emerson, dated July 8th, 1849. What was the nature of that "play"?

Shortly after her arrival in Rome, in the spring of 1847, Miss Fuller, on the evening of Holy Thursday, went to Vespers at St. Peter's with some friends. The party became separated and she was at a loss what to do. "Presently a young man of gentlemanly address came to her and begged, if she were seeking anyone, that he might be permitted to assist her." At last it became evident beyond a doubt, that the party could not longer be there, and as it was then quite late and the crowd all gone, they went into the piazza to find a carriage. There were no carriages, so Margaret was compelled to walk with her stranger friend the long distance between the Vatican and the Corso. At her door they parted, and Margaret finding her friends already at home related the adventure. This is Mrs. Story's account. This chance acquaintance was the Marchese Ossoli. Within a few weeks he made an offer of marriage, which was declined, and Miss Fuller left for the North. They met again in the following November, the offer was renewed, and within a few weeks the pair were married. When, where, or by whom, we do not know to this day.

"I have heard that from the beginning," says Emerson, "Margaret Fuller idealized herself as a sovereign. She told a friend that she early saw herself to be intellectually superior to those around her, that for years she dwelt upon the idea that she was not her parents' child, but an European princess confided to their care." Here then was an opportunity ready at hand for realizing this very un-American ideal. If the revolution had succeeded, as seemed not at all unlikely to the revolutionists, she would have come pretty near being a "European princess," at any rate she would have been the first lady in the land, and that is closer than one usually comes to the realization of his childish fancies.

This is not offered as the whole explanation of Miss Fuller's conduct; the motives for any marriage are never very simple; but it is a pretty good guess at her central thought. All we know of the Marchese is

entirely to his credit, and it is altogether probable that Miss Fuller "wearied with the over intellection and restless aspiration of the accomplished New Englander of that time, found in the simple geniality of the Italian nature all the charm and novelty of contrast." Let us hasten to add that no word ever escaped her or her friends, that would indicate the least regret for her hasty action.

The action was hasty. In May, 1847, let us repeat, she arrived in Rome for the first time and remained only two months. She was back again in Rome at the end of October, and her child was born on the 5th of September following. That would be considered hasty in American society in these days at any rate.

The central fact in the life of Margaret Fuller is, as in the life of most women, that she married and became a mother, and it made a corresponding noise. The whole proceeding was perfectly regular, natural and simple. She gives us a straightforward and truthful account of the sequence of events which is entirely convincing, until her friends begin to supply evidence upon a subject on which no evidence was needed. That makes us ask, not what they say, but what they can prove.

During the winter in Rome after the child was born, when her trouble was sore upon her, the Marchesa, as she now was, sent for Mrs. Story, wife of William Wetmore Story, the sculptor, and confided the "secret" to her. She also gave to her confidante, certain papers and parchment documents to keep, in view of her death which she feared was impending. Mrs. Story with laudable self-abnegation declined to read the papers, save one or two, though she had perfect liberty to do so. We could now wish she had read them all and informed us of her researches, or else kept absolutely quiet about the matter.

At the time of Mr. Higginson's writing, he had before him Mrs. Story's original letter, and on the strength of it, states that Margaret showed to Mrs. Story the certificate of her marriage with Ossoli. This same letter had been published long before in the Memoirs. All that Mrs. Story tells in the letter is, that at the time of handing over the packet, they read together a document written in Latin on a piece of parchment. The utmost she claims is, that it was a certificate given by a priest to the effect that Angelo Eugène Ossoli — the name of the child was Angelo Eugène Philip — was the legal heir to whatever fortune and title should come to his father. To this was affixed his seal with those of the other witnesses, and the Ossoli crest was drawn in full upon the paper. This is the relation and this is the document to which Mr. Higginson refers as a marriage certificate, with Mrs. Story's original letter before him. If this be offered as evidence, then it is fair to say it is no evidence at all. Mrs. Story probably could not read

Latin, especially the Latin likely to be written by an Italian priest of those days; the document, according to her showing, could not have been a marriage certificate, for the name of the heir is not usually specified in such writings; the crest drawn in full upon the paper does not increase its authenticity, and the witnesses were witnesses—to what?

When the crisis was past, the papers were returned to the Marchesa and were lost in the final disaster. In her own writings, so far as published up to this time, Margaret assigns no date to her marriage, though she probably gave the details in a "little book" which perished with her. Her friends conclude on purely physiological grounds, that it took place on or before December 5th, 1847. Therein lies the penalty of all secret marriages.

The motives for keeping the marriage a secret are perfectly obvious. The old Marchese Ossoli was about to die and the patrimony to be divided. He had three sons, one employed in the Papal Court as Secretary of the Privy Council, one as a member of the Guard; the third and youngest, was on the side of the Revolution; he was a Catholic, married in secret to a Protestant; the courts, civil and ecclesiastic, were in the hands of his enemies. Above all, the success of his cause was not yet assured.

The situation of the woman was pitiable. Married in secret, and secrecy in such cases carries shame; without a friend to share her trouble, in the midst of the alarms of war, her husband's life in peril, she retired to the mountains of Rieta in poverty and solitude, and there endured the curse of Eve and inherited the blessing. In seven weeks the brave New England woman was back in Rome and spent the momentous winter of 1848 in the city, with occasional visits to Rieta, where she had left her child in the hands of attendants who proved both cruel and treacherous. In April came the horrors of the siege; long days and nights in hospitals filled with wounded and fever stricken, her husband at his post of danger on the walls and she at times by his side. There was the real Margaret Fuller, the Puritan woman in her New England heroism and austerity. By the first of July all was at an end; at an end too all foolish dreams of unreal greatness. Then she wrote the whole story to her mother.

The friends of Margaret Ossoli were naturally much surprised, but most of them were too well bred to manifest it. Her mother sent her words of comfort and expressions of endearment. The Marchesa Arconati loved her the more, "now that we can sympathize as mothers." To Mr. Story, who appears not to have received the secret from his wife, she wrote: "moral writers cannot exaggerate the dangers and plagues of keeping secrets,"—and she had brotherly love in return. There was at this time a large colony of her fellow countrymen in Italy, for we

have heard her desiring to be delivered from the sound of the English language, and from them she received every consideration. At home, she complains, there was some meddling curiosity. Her letters, written during the period when the marriage was yet unacknowledged, have a curious interest, particularly those addressed to Emerson. They are singularly truthful and sincere, and yet disclose nothing.

Notwithstanding the loss of the intellectual riches of New England, those days of Italian poverty, were Margaret's happiest days. In a letter to her sister, the wife of William Ellery Channing, she says: "in my child I find satisfaction for the first time to the deep wants of my heart." She dwells upon the purity and simple strength of her husband's character. "He is capable of sacred love; he showed it to his father, to Rome, to me; now he loves his child in the same way." To her mother she wrote: "Of all that is contained in books, he is entirely ignorant, yet he has excellent practical sense, a very sweet temper and great native refinement. I have never suffered a pain that he could relieve; his devotion when I am ill is to be compared only with yours." This is not a bad assemblage of qualities in a husband, and her testimony is confirmed by all the Americans in Italy who knew him, Mr. and Mrs. Story, Lewis Cass, W. H. Hurlbutt, Horace Sumner, Mozier, Chapman and the Greenoughs.

The family remained nearly a year in Italy after the fall of Rome, chiefly in Florence. Of this halcyon time Mr. Hurlbutt, consul at Turin, gives rather a free account. He admires their domestic life without stint, and gives a pretty picture of Ossoli, seated by his wife, dressed in a dark brown coat, reading some patriotic book. Mr. Hurlbutt always found him at home, save when a number of American and English visitors came in. On those occasions he used to take his leave and go to the *café*, but we must not blame him too severely for that.

Neither Margaret nor her husband, nor both together, possessed the six hundred dollars a year necessary for living in Italy, and as all avenues of employment were closed to him on account of his birth and politics, the pair turned their faces to America, where the wife with rare courage proposed to take up the burden on behalf of her own family, which she had borne with such fidelity for her father's.

From motives of economy, they sailed from Leghorn in the merchant ship *Elizabeth*, a barque commanded by Captain Hasty; it was the 17th of May, 1850, before the ship got under weigh. Before Gibraltar was reached the Captain lay dead of the smallpox, and on the ocean voyage the child contracted the disease, but recovered handsomely.

On Tuesday, the 18th of July, the *Elizabeth* was off Navesink on the Jersey Coast; the weather thick, the wind from the South of East. To

make a good offing and in the morning run down before the wind, past Sandy Hook, the mate, who was now in command, stood to the East of North sailing well in the wind. By nine o'clock a stiff breeze was blowing; it grew into a gale, and by midnight the weather was very heavy. The *Elizabeth* was now under reefed lower sails and headsails, everything aloft made snug and all hands on deck. The gale increased to such a hurricane as had not been known for years, and what with wind and what with tide, the master of the *Elizabeth* overran his course, drifting to leeward all the time, and piled up his ship about four in the morning on Fire Island, the grave of many another good craft before and since. The main and mizzen were cut away, but in spite of the relief the bow held hard; the stern swung round till the barque was broadside and hard aground, and the seas made a clear breach over her. The heavy cargo of marble went through the bilge, and now the *Elizabeth* was at the mercy of the sea. Between decks everything was awash, and the few passengers were huddled together to the windward. By daybreak they gained the shelter of the forecastle and saw the shore not a cable's length away, with wreckers and their waggons ready for salvage, but not for rescue. By noon, eight hours after the stranding, a life boat arrived from Fire Island, which was less than four miles away, but not the slightest attempt was made to launch it. Davis, the mate, behaved most creditably, according to his own story. He devised a plan of escape and proved its efficacy by swimming ashore in company with the widow of his late captain; all but four of the crew also proved its feasibility; the plan was primitive, though practicable, and yet not the slightest attempt was made to launch the lifeboat into a sea in which men could swim with safety. By three o'clock the cabin had gone adrift, the stern settled down, the forecastle filled and the refugees were driven to the open deck, where they were soon huddled about the foremast. Presently this went by the board, carrying the decks away. Two remaining members of the crew swam ashore and two were drowned; the steward seized the child and plunged in; their bodies were washed ashore a few minutes later. Margaret and her husband went down together. The mate said it was their own fault; that is what he might have been expected to say. Their bodies were never recovered. When the life-boatmen were derided for their cowardice, they excused themselves by saying they did not know there was anyone of importance on board.

The story of life-saving on the coast of the United States goes back to 1786, when Noyes, the blind physician of Boston, organized the Humane Society of the Commonwealth of Massachusetts. The National Congress laid its paralyzing hand upon the movement in 1849, by passing an appropriation of ten thousand dollars for the work; until 1876, the

service was put to the basest uses by the politicians, and during that unhappy period more vessels than the *Elizabeth* were sacrificed to the greed of the crippled and degenerate protégés of the politicians.

This was the end of the tragedy of Margaret Fuller's life. The real tragedy would have begun, had she to commence again her life with a foreign husband in New England.

If we possessed only the record of Margaret Fuller's life from the time she left Boston and came under the sane influence of the editor of the *Tribune* until its untimely end, we should miss much of the pathology of hysteria as manifested in herself, in other women, and in the men amongst their friends who were like women, but this record would show her to be entirely admirable. This normal life covered less than five years. She died at the age of forty. George Eliot was older than that when her first notable work appeared; Madame de Stael was forty-one and George Sand nearly as old.

It is useless to speculate upon what Margaret Fuller might have accomplished had life been spared to her. Nothing is more futile than such speculations. If Kingsley had ceased writing at thirty-six, and Kipling had succumbed to his attack of pneumonia in New York, their names would be held in mysterious reverence; and the public would busy itself with wonder as to the nature of their future accomplishments and with lamentations at their untimely fate. The public mind would surely have been wrong; probably it is wrong also in surmising that Margaret Fuller might have accomplished something.

All we can say, to conclude the matter, is that the personality of Margaret Fuller was a romantic one, that she and her friends were in the habit of talking romantically about it; that is, without enquiring too clearly into the truth of what was said; that romantic things really did occur, and that with the irony usual in such cases, nothing came of it after all.

ANDREW MACPHAIL.

THE PILGRIMS.

An uphill path, sun-gleams between the showers,
Where every beam that broke the leaden sky
Lit other hills with fairer ways than ours;
Some clustered graves where half our memories lie;
And one grim Shadow creeping ever nigh:
And this was Life.

Wherein we did another's burden seek,
The tired feet we helped upon the road,
The hand we gave the weary and the weak,
The miles we lightened one another's load,
When, faint to falling, onward yet we strode:
This too was Life.

Till, at the upland, as we turned to go
Amid fair meadows, dusky in the night,
The mists fell back upon the road below;
Broke on our tired eyes the western light;
The very graves were for a moment bright:
And this was Death.

JOHN McCRAE.

JAPAN AND RUSSIA.

The commencement of hostilities by the night attack of the Japanese torpedo boats on the Russian vessels at Port Arthur, on the 9th February, 1903, was charged by Russia against Japan as a violation of international usage and a grossly dishonourable and treacherous act. This charge has been iterated again and again, as well in the proclamations of the Tsar and the army orders of General Kuropatkin, as in the Russian press and in the press of other countries friendly to Russia. The Japanese have completely refuted it. They have pointed out that they repeatedly warned the Russian Government, in the restrained but well understood language of diplomacy, that the failure of the negotiations would result in Japan taking such independent action as she deemed necessary to protect her interests — that is, would result in war. They have shown that, apart from these warnings, but especially in view of them, the communications to the Russian Government of the 6th February, coupled with the formal withdrawal on that date of the whole Japanese Legation from St. Petersburg, were tantamount to a declaration of war. They have contended, moreover, not only that Russia ought to have been prepared for hostilities on the 9th February, but also that Russia *was* prepared, and that the Port Arthur assault was nothing more than a tactical surprise. In support of this contention Baron Snyematsu has enumerated certain acts on the part of Russia, which, if his statements are true, establish at least her knowledge that war was about to ensue. On the 21st January, Russian troops were sent to menace the northern frontier of Corea. A week later, Alexieff ordered the Russian forces in the neighbourhood of the Yalu River to prepare for war, and additional troops were hurried forward towards that river. On the 1st February, the Japanese Commercial Agent at Vladivostock was requested by the Russian Government to notify Japan that a state of siege might be expected at any moment. On the 4th February, the Russian fleet at Port Arthur made a demonstration in force to the south-east, which created intense excitement in Japan. And at the

moment of the torpedo attack on the 9th February, the Russian ships lay under a full head of steam, outside the harbour of Port Arthur, in a perfect battle array, with their decks cleared for action; and the instant that the first torpedo was launched, the Russians opened fire on the Japanese boats.

But there is another interesting question upon which less light has been thrown. Had the negotiations reached, on the 6th February, such an *impasse* as justified a recourse to the arbitrament of battle? The Russian Government profess to have been greatly surprised by their sudden termination. They hoped and tried, they say, to maintain peace; in their efforts to bring the negotiations to a peaceful conclusion, they did all that dignity would allow to meet the wishes of Japan. Contrariwise, Japan asserts that throughout the negotiations Russia treated her with great arrogance, was simply "making a fool of her," and had no intention whatever of entering into the engagement required of her by Japan.

Ordinarily one would expect the rupture of negotiations between two parties to result, first, when either of them becomes convinced that they are so wide apart in essentials that there is no chance of ultimate agreement or compromise; or, secondly, when either knows or fears that under cover of the negotiations the other is taking such steps as will materially change the *status quo* to his own advantage.. To these may be added a third cause, which arises when one party so behaves in the negotiations as to wound the dignity and the *amour propre* of the other to the breaking point. There is no doubt that the last two of these causes both contributed to the termination of the negotiations between Russia and Japan. What action Russia took between the commencement of the negotiations and the outbreak of hostilities, to maintain and secure her grasp on Manchuria, will be more fully known in the future, but it is already known to all the world that during the period she strongly reinforced her army in Manchuria, and increased her fleet in the Pacific by adding thereto war vessels of an aggregate tonnage exceeding 80,000 tons. It is true that these may have been merely precautionary measures; and, on the other hand, the speed and precision of Japan's early evolutions and the perfection of her mobilization, lead to the presumption that during this period Japan herself either was preparing, or had her preparations already made, for the eventuality of war.

Japan had good ground also for complaining of arrogant treatment at the hands of Russia during the negotiations; and the resentment of the Mikado was undoubtedly provoked, and his patience sorely tried, by the dilatory methods and the flimsy excuses of the Russian diplomacy.

For proof of this, one needs to look no further than the correspondence regarding the negotiations which passed between Baron Komura, the Minister of Foreign Affairs at Tokio, and Mr. Kurino, the Japanese Minister at St. Petersburg, and from which the extracts in this article are taken. At the outset, the negotiations were unwarrantably delayed by a truculent insistence on the part of Russia to conduct them as and where she pleased. The negotiations were entrusted by Japan to Mr. Kurino, to be conducted by him at St. Petersburg, and he promptly opened them in an interview with Count Lamsdorff on the 31st July, 1903. It is characteristic of the Tsar's form of government that the Russian Minister of Foreign Affairs, while perfectly satisfied himself to enter into the negotiations, was unable to do so until he had seen the Tsar and obtained his sanction. This sanction was communicated to Mr. Kurino on the 5th August, and he was instructed on the following day to present the proposals of Japan to the Russian Government. Count Lamsdorff, however, "being now very much occupied," could not receive Mr. Kurino until the 12th August, when the latter handed to him the Japanese proposals. In a despatch to Tokio of the 24th August, Mr. Kurino reported that on the previous day he had been informed by Count Lamsdorff that

> he had studied the project seriously, but the Emperor having been absent over a week on account of the manœuvres, he had been unable to take any steps in the matter; but he asked my opinion about transferring the negotiations to Tokio, as there were many details which would have to be referred to Admiral Alexieff.

On the 27th August Mr. Kurino, under instructions from Tokio, informed Count Lamsdorff that the Japanese Government preferred to continue the negotiations at St. Petersburg, believing that by so doing the work would be greatly facilitated, and the Japanese Government, having placed the negotiations in his hands, would dislike to make any change. Count Lamsdorff replied that the Tsar wished to conduct the negotiations at Tokio so as to expedite the matter. Mr. Kurino again argued and urged the propriety of conducting them at St. Petersburg, but Count Lamsdorff

> repeated what he had just said, and insisted upon his proposition.

On the 29th August Mr. Kurino, being further instructed from Tokio, again urged upon Count Lamsdorff the desire of the Japanese Government to continue the negotiations at St. Petersburg. In a lengthy discussion Count Lamsdorff said,

> the Russian Government desired to transfer the negotiations to Tokio on account of the necessity of consulting with Admiral Alexieff, *and also to manifest a sense of deference to Japan*, as the proposals had been made by her . . . . At the conclusion, he said,

he is to have an audience of the Emperor to-day, and will explain to him the reasons why an early understanding between the two countries is desirable, as mentioned by me; and he promised to repeat to His Majesty the special desire of the Japanese Government to conduct the negotiations at St. Petersburg; but he added that no change of view on the subject could be expected. ,

After another long interview between Mr. Kurino and the Russian Minister on the 4th September, the Japanese Government yielded.

Other vexatious delays transpired. Mr. Kurino telegraphed to Baron Komura on the 22nd November:

I saw Count Lamsdorff on the 22nd November. He said that the modifications are already in the hands of the Emperor; but on account of the illness of the Empress, the former does not attend to any business affairs; hence the delay.

and on the 27th November:

Count Lamsdorff told me he did not see the Emperor November 25th, on account of the sickness of the Empress. Interior inflammation of her right ear has necessitated an operation.

and again, on the 4th December:

To my question whether it is not possible for him to have audience at an earlier date, he [Count Lamsdorff] said that Saturday is the *fête* of Crown Prince, no business is transacted on Sunday, and he will be occupied with other affairs on Monday.

In January the situation became acute, Japan was excited by the menacing activities of Russia in Manchuria and on the Pacific, and the relations between the two Powers were strained to the breaking point. Yet, in an interview on the 28th January, when Mr. Kurino pressed upon Count Lamsdorff the gravity of the situation, and urged "the danger of prolonging the present condition," Count Lamsdorff replied

that he knows the existing condition of things very well, but that the dates of audience being fixed . . . . it is not now possible to change them; and he repeated that he will do his best to send his reply next Tuesday.

But no reply was forthcoming on Tuesday, and, after waiting until the following Friday, Mr. Kurino was instructed to close his Embassy and leave St. Petersburg.

The main question has been so far only indirectly touched. Were the differences between the negotiations so great as to preclude the possibility of ultimate agreement or compromise? This can not be judged without the means of knowing what Japan's demands were and the length to which Russia signified her willingness to go in order to satisfy them. Fortunately, the necessary information is available in the correspondence between Baron Komura and Mr. Kurino, which has already been referred to, and from which the following account has been taken.

The reasons which prompted Japan to open negotiations are put forward in a despatch from Baron Komura to Mr. Kurino of the 28th July, 1903:

The Japanese Government have observed with close attention the development of affairs in Manchuria, and they view with grave concern the present situation there. So long as there were grounds for hope that Russia would carry out her engagement to China and her assurances to other Powers on the subject of the evacuation of Manchuria, the Japanese Government maintained an attitude of watchful reserve. But the recent action of Russia in formulating new demands in Peking and in consolidating rather than releasing her hold on Manchuria compels belief that she has abandoned the intention of retiring from Manchuria, while her increased activity along the Corean frontier is such as to raise doubts regarding the limits of her ambition. The unrestrained permanent occupation of Manchuria by Russia would create a condition of things prejudicial to the security and interest of Japan. Such occupation would be destructive of the principal of equal opportunity and an impairment of the territorial integrity of China. But, what is of still more serious moment to the Japanese Government, Russia stationed on the flank of Corea would be a constant menace to the separate existence of that Empire, and in any event it would make Russia the dominant Power in Corea. Corea is an important outpost in Japan's line of defence, and Japan consequently considers the independence of Corea absolutely essential to her own repose and safety. Japan possesses paramount political as well as commercial and industrial interests and influence in Corea, which, having regard to her own security, she cannot consent to surrender to, or share with, any other Power . . . .

In accordance with the views set forth in the above-cited despatch, the Japanese proposals, which were submitted as soon as the Tsar had consented to negotiate, dealt equally with Manchuria and Corea, and were expressed in the following terms:

1. Mutual engagement to respect the independence and territorial integrity of the Chinese and Corean Empires, and to maintain the principle of equal opportunity for the commerce and industry of all nations in those countries.

2. Reciprocal recognition of Japan's preponderating interests in Corea and Russia's special interests in railway enterprises in Manchuria, and of the right of Japan to take in Corea and of Russia to take in Manchuria such measures as may be necessary for the protection of their respective interests as above defined, subject, however, to the provisions of Article 1 of this Agreement.

3. Reciprocal undertaking on the part of Russia and Japan not to impede development of those industrial and commercial activities respectively of Japan in Corea and of Russia in Manchuria, which are not inconsistent with the stipulations of Article 1 of this Agreement.

Additional engagement on the part of Russia not to impede the eventual extension of the Corean railway into southern Manchuria so as to connect with the East China and Shan-hai-kwan-Newchang lines.

4. Reciprocal engagement that in case it is found necessary to send troops by Japan to Corea, or by Russia to Manchuria, for the purpose either of protecting the interests mentioned in Article 2 of this Agreement, or of suppressing insurrection or disorder calculated to create international complications, the troops so sent are in no case to exceed the actual number required and are to be forthwith recalled as soon as their missions are accomplished.

5. Recognition on the part of Russia of the exclusive right of Japan to give advice and assistance in the interest of reform and good government in Corea, including necessary military assistance.

6. This Agreement to supplant all previous arrangements between Japan and Russia respecting Corea.

One might have supposed that these proposals would form the basis of the following negotiations; and, in the sense that they formulated the demands of Japan, no doubt they did. Russia, however, found it inconvenient to present amendments; from her point of view it was clearly undesirable, at the very first stage, to oppose a flat denial to some of the Japanese proposals; and she therefore insisted upon presenting counter-proposals of her own, which took the place of the Japanese proposals as the basis of negotiation. It is not necessary to set out the counter-proposals in detail. Handed to Japan on the 3rd October, they were comprised in eight articles, seven of which dealt exclusively with Corea. These seven articles or propositions were subjected to several amendments by both sides, and, in the end, two, at least, were not accepted; but at one time or another the parties were so nearly in agreement in respect of them all — Russia so nearly met the wishes of Japan with regard to Corea and Japan's interests in that country — that if it had been a question of Corea alone, the two nations would most probably have arrived at a mutually satisfactory settlement. Manchuria proved the stumbling-block. The Japanese proposals were based on reciprocal undertakings covering both Corea and Manchuria; the one article in the Russian counter-proposals concerning Manchuria was as follows:

I.*

Recognition by Japan of Manchuria and its littoral as in all respects outside her sphere of interest.

The Mikado's Government at once rejected this proposition, and offered the following in its stead:

II.

Engagement on the part of Russia to respect China's sovereignty and territorial integrity in Manchuria, and not to interfere with Japan's commercial freedom in Manchuria.

Recognition by Japan of Russia's special interests in Manchuria and of the right of Russia to take such measures as may be necessary for the protection of those interests so long as such measures do not infringe the stipulations of the preceding Article.

Mutual engagement not to impede the connection of the Corean railway and the East China railway when those railways shall have been eventually extended to the Yalu.

No agreement on this amendment could be reached, each government insisting upon the impossibility of accepting the other's proposition. The Russian Government contended that the recognition by Japan of

* Roman numerals are attached to the several propositions for convenience of reference.

Manchuria as being outside her sphere of interest, was Russia's only compensation for her concessions in respect of Corea; and that the acceptance of the Japanese amendments would be contrary to the principle always insisted upon by Russia, that the question concerning Manchuria was one exclusively for Russia and China, admitting of no interference on the part of any third Power. Japan replied that she did not ask for any concession with respect to Manchuria, her proposal being simply to have confirmed in the Agreement the principle which had been voluntarily and repeatedly declared by Russia; and that she possessed in Manchuria her treaty rights and commercial interests, for which she must obtain Russia's guarantee. On the 30th October, however, Japan presented fresh amendments to the Russian proposition (I.), which were as follows:

III.

Mutual engagement to respect the independence and territorial integrity of the Chinese and Corean Empires.

Mutual engagement to establish a neutral zone on the Corea-Manchurian frontier extending 50 kilometres on each side, into which neutral zone neither of the Contracting Parties shall introduce troops without the consent of the other.

Recognition by Japan that Manchuria is outside her sphere of special interest, and recognition by Russia that Corea is outside her sphere of special interset.

Recognition by Japan of Russia's special interests in Manchuria and of the right of Russia to take such measures as may be necessary for the protection of those interests.

Engagement on the part of Japan not to interfere with the commercial and residential rights and immunities belonging to Russia in virtue of her treaty engagements with Corea, and engagement on the part of Russia not to interfere with the commercial and residential rights and immunities belonging to Japan in virtue of her treaty engagements with China.

Mutual engagement not to impede the connection of the Corean railway and the East China railway when those railways shall have been extended to the Yalu.

It will be noticed that in these amendments Japan went so far as to concede Manchuria to be outside her sphere of *special* interest, but demanded again the independence and territorial integrity of China and a guarantee of her own interests in Manchuria.

These amendments were, in turn, rejected by Russia, Count Lamsdorff stating in an interview with Mr. Kurino on the 12th November, that the Manchurian question divided the two parties, and that the Russian Government always considered this question to be a question exclusively between Russia and China, and to be settled by an arrangement between those two nations. Mr. Kurino urged that Japan had a perfect right to demand the independence and territorial integrity of China and a formal guarantee of her rights and interests in that country, but Count Lamsdorff replied that the objection related rather to the form than the substance of the proposal. In Manchuria other Powers also had rights

and interests, and Russia could not enter into special arrangements with each of those Powers regarding that Province. Mr. Kurino observed that should the Russian Government be in accord with Japan in principle, it was deeply to be regretted that an understanding could not be reached for want of a suitable formula, and ardently asked him to use his influence in bringing about a satisfactory solution in accordance with the principles already admitted by Russia. In another interview on the 22nd November, Count Lamsdorff said that as to Manchuria,

> Russia once took possession of the country by right of conquest; nevertheless, she is willing to restore it to China, but with certain guarantees . . . . While China is still insisting upon her refusal to give such guarantees, it is not possible for Russia to come to any arrangement with a third Power . . . .

The Japanese Minister replied that his Government had no wish to interfere with direct negotiations between the two countries concerned, but only wished the independence and integrity of China as repeatedly declared by Russia, and security for Japan's important interests in Manchuria. About this time occurred the illness of the Russian Empress, and, in spite of the urgent messages from Tokio, the negotiations were delayed until the 11th December, when, in reply to the Japanese amendments (III.) of the 30th October, the Russian Minister at Tokio presented new counter-proposals to Japan, which, with the exception of an article relating to the connection of the Corean and East China railways, *ignored* altogether the question between the two Governments concerning Manchuria. Baron Komura pointed out the fundamental difference in territorial compass between Japan's original proposals and Russia's new counter-proposals, and expressed the hope that the Russian Government would reconsider their position regarding that branch of the question. At the same time, he instructed Mr. Kurino to deliver to Count Lamsdorff a strongly-worded *Note Verbale* covering the same ground, and asking for certain amendments to the new Russian counter-proposals concerning Corea.

On the 7th January, 1904, Japan was informed that Russia agreed to Japan's amendments to the new Russian counter-proposals with two modifications; first, a mutual engagement not to use any part of the territory of Corea for strategical purposes; and, second, a mutual engagement to consider the territory of Corea north of the 39th parallel as a neutral zone, within the limits of which neither Russia nor Japan should introduce troops. If these two conditions were agreed to, the Russian Government were prepared to include in the Agreement an article of the following tenor:

IV.

Recognition by Japan of Manchuria and her littoral as being outside her sphere of interests, whilst Russia, within the limits of that province, will not impede Japan, nor other Powers, in the enjoyment of rights and privileges acquired by them under existing treaties with China, *exclusive of the establishment of settlements.*

From this time the communications between the two Governments took on a tone of increasing antagonism; conciliation was displaced by peremptoriness. Japan declined on the 13th January, to entertain either the proposed agreement not to use any part of Corean territory for strategical purposes or the proposal to establish a neutral zone, and, offered the following modifications of the Russian proposal (IV.) concerning Manchuria:

V.

Recognition by Japan of Manchuria and its littoral as being outside her sphere of interest, and an engagement on the part of Russia to respect the territorial integrity of China in Manchuria.

Russia within the limits of Manchuria will not impede Japan nor other Powers in the enjoyment of rights and privileges acquired by them under the existing treaties with China.

Recognition by Russia of Corea and its littoral as being outside her sphere of interest.

Recognition by Japan of Russia's special interest in Manchuria and of the right of Russia to take measures necessary for the protection of those interests.

It is not clear why Japan refused to give the undertaking not to use any part of Corean territory for strategical purposes. She had previously expressed her willingness to enter into an agreement not to construct on the Corean coast any military works capable of menacing the freedom of navigation in the Straits of Corea. It may be that having in mind the continued maintenance of a Russian army in Manchuria, and knowing the impossibility of gettting a similar undertaking from Russia regarding the non-uses for strategical purposes of Manchurian territory, she considered that such an undertaking might place her at some future time in a position of great disadvantage. Another plausible reason suggests itself. It was agreed by the Russian Government in the progress of the negotiations that, for the purpose of protecting her interests in Corea, or for the purpose of suppressing insurrections or disorders capable of creating international complications, Japan might send troops to Corea. The Mikado's Government may have argued that the employment of troops in Corea for either of those purposes involved, of necessity, the use of some part of Corean territory for strategical purposes. Whatever Japan's motives may have been, and they are not in any way disclosed in the correspondence from which this account of the negotiations is taken, it is certain that if Russia had agreed to the

essence of Japan's proposals in other respects, the definite refusal of Japan to give this undertaking would have been taken to imply that the negotiations were a mere blind, and that Japan was determined on war. It is inconceivable that Japan could have assumed such an attitude and risked the danger of alienating the sympathies of all the Powers.

The reasons for Japan's refusal to agree to the establishment of a neutral zone are also absent from the correspondence. At an earlier stage in the negotiations she had assented to the establishment of a neutral zone to be carved, however, not out of Corea alone, as was proposed by Russia, but equally out of Manchuria and Corea, extending 50 kilometres on each side of the frontier (III.). A possible explanation of Japan's later attitude to this question is that if the independence and territorial integrity of China were secured and Manchuria remained a part of the Chinese Empire under Chinese control, the establishment of a neutral zone was a question between China and Corea, and would be no more necessary in the future than it had been in the past. If, on the other hand, Russia meant to stay in Manchuria, the bone of contention still remained, and it was useless to talk of a neutral zone.

In Japan's last proposals concerning Manchuria (V.), she insisted, as she had done throughout the negotiations, upon the territorial integrity of China, and refused to accept the clause (IV.) excluding the establishment of settlements in Manchuria, because it conflicted with the stipulations of an already existing Treaty between Japan and China.

To the Japanese proposals of the 13th January no reply was ever delivered. It was evident that neither party would give way on the question of Manchuria; and having repeatedly urged upon the Russian Foreign Minister the danger of the situation and pressed for a reply, Mr. Kurino was instructed, on the 5th February, formally to withdraw his Embassy from St. Petersburg, and to present to Count Lamsdorff the following communication:

> The Government of His Majesty the Emperor of Japan regard the independence and territorial integrity of the Empire of Corea as essential to their own repose and safety, and they are consequently unable to view with indifference any action tending to render the position of Corea insecure.
>
> The successive rejections by the Imperial Russian Government by means of inadmissible amendments of Japan's proposals respecting Corea, the adoption of which the Imperial Government regarded as indispensable to assure the independence and territorial integrity of the Corean Empire and to safeguard Japan's preponderating interests in the Peninsula, coupled with the successive refusals of the Imperial Russian Government to enter into engagements to respect China's territorial integrity in Manchuria, which is seriously menaced by their continued occupation of the Province, notwithstanding their treaty engagements with China and their repeated assurances to other Powers possessing interests in those regions, have made it necessary for the Imperial Government seriously to consider what measures of self-defence they are called upon to take.

In the presence of delays, which remain largely unexplained, and naval and military activities which it is difficult to reconcile with entirely pacific aims . . . . etc.

Reviewing the negotiations, it seems clear that the *causa belli* lay in the refusal of Russia to guarantee the territorial integrity of China. From first to last this was insisted upon by Japan as a *sine quâ non*; from first to last the proposal was ignored or rejected by Russia. With anything less than the continued integrity of China, Japan could not be satisfied. If Manchuria had passed permanently under Russian dominion, either by virtue of continued possession or by virtue of a bargain imposed upon China, whatever guarantees, if any, Japan would then have had for the protection of her rights and interests in that province would speedily have become worthless under the exclusive methods of the Russian colonization policy; and the maintenance of a Russian army in Manchuria would have been a standing menace to Japan's position in Corea. To prevent this permanent occupation of Manchuria was deemed vital by Japan, and Russia's refusal to give the required undertaking, and the consequent implied intention to assert her sovereignty over Manchuria, created a situation which no negotiations could solve, and which could only result in war if Japan was able and willing to fight. The Russian Government is thought by many, and not without reason, to have believed that Japan was bluffing and would never come to blows; but it is useless to speculate upon what concessions, if any, they would have made if their expectations had been in measure with ensuing events.

V.

WILLIAM BUTLER YEATS

"God hath made out of his abundance a separate wisdom for everything which lives, and to do these things is my wisdom." This old Celtic saying, which William Morris loved, and which Mr. Yeats has brought into the dialogue of one of his mystical stories strikes the note for us of the poet's own sometimes perplexing music. His themes and melodies are something apart from the accepted and popular themes and melodies. They are the result of a new conception, of a *separate* wisdom; and he is desirous that they shall be so considered. This is not to say, however, that Mr. Yeats is a poet who writes for the elect. "Fit audience though few," is not, apparently, his desire. On the contrary, he pours contempt upon "the coteries," and aspires for his part to become the poet of the people. The apparent contradiction of the above statement requires some elucidation, and for our light we must turn to the various works in which the author has set forth his point of view.

The writings of Mr. Yeats group themselves in a three-fold division of prose-studies, plays and poems. In the first, he states quite amply and categorically, with illustrations, his aims and the ideas which govern all his writing; in the second, the ideas are embodied in the form most likely to reach the public; and in the third, the poet is, perhaps, most sincerely and spontaneously expressing his art. It is for the sake of the second and third of these divisions — for the plays and poems can scarcely be thought of apart — that one is led to examine the first. Very little acquaintance with his work is necessary to produce the conviction that Mr. Yeats is first and foremost a poet. A glance at this series of volumes, *The Secret Rose, The Celtic Twilight, The Wind Among the Reeds, The Shadowy Waters, The Land of Heart's Desire,* "whose names are five sweet symphonies," would stamp the idea, though one read no farther than the title-pages. Endowed with the poetic faculty, brought up in a country of romantic scenery and abounding in romantic legends, educated apart from systems of deadening uniformity, Mr. Yeats had only to sing as his instinct, surroundings

and education prompted, in order to secure himself sympathetic and grateful hearers. He has done this, but he has also chosen to do more. He has chosen to take up a cause; to preach a crusade; to challenge his contemporaries; and in so doing he has rather alienated some of his adherents, and not always served his mistress, Poesie, who should have retained his sole allegiance.

It is in the somewhat heterogenous volume, called for no very obvious reason, *Ideas of Good and Evil,* that the author sets forth his theories most extensively. There, in nearly a score of short essays, we find variously expressed his view of himself as the apostle of a new school, the school of the imaginative, the symbolic, the visionary; the school of Maeterlinck, and Villiers de l'Isle Adam and the Celtic Revival. Whether he writes of *Popular Poetry,* or of *Magic,* of *Symbolism in Poetry,* or of *The Celtic Element in Literature,* he is putting the same idea, the idea that the world has wandered terribly far from the sources of poetry and inspiration, and requires a new birth of imagination before it can really live again. He finds many signs that the new birth is at hand; he knows elect souls who are ready to assist at the miracle; he knows fountains of literature — such as that of the Irish legends — which will have a vivifying and strengthening force. And when the miraculous thing is accomplished, when people have ceased to regard the outward shows of things, and have come to have revelations of the true essences, then we shall find that the symbolists and visionaries of to-day, joining hands with the poets of insight of all ages (Mr. Yeats seems to put high among these, William Morris, Shelley, and, more especially, Blake, with the tellers of ancient tales — Homer and the Celtic minstrels) shall lead us back to the ancient ideal state, where poetry is inseparable from religion, and both are universal. Here we have the explanation of the poet's dual position. He stands apart, but not because he would be alone. He finds his generation singing out of tune, but he believes that if the right note be given, it will be recognized, and melody will once more prevail. The conception is alluring, but rather vast and vague. Moreover, under its liberal mantle, one seems to detect features which betray the vice of exclusiveness. If we do not misconstrue Mr. Yeats, his hopes for the regeneration of poetry are largely centred in Ireland, and for his popular audience he does not look far beyond the Irish shore. Even if we put aside this element of localism, the theory seems hardly to justify the writing which has been spent upon it. If it be true, as Mr. Yeats declares, that "the arts have failed, fewer people are interested in them every generation"; statement of the fact in an essay will not bring them back; but an original poem will surely gather hearers. If the author is convinced, as he declares, that the age of criticism is

past, he should, to be consistent, abstain from adding to the body of critical writing.

To imply, however, that this volume contains nothing to inspire admiration or respect for its author's art would be ungracious and untrue. The essays on Shelley and on Blake are happy and suggestive, if sometimes extravagant, and give unmistakable evidence of the writer's affinities among the poets. For Blake, Mr. Yeats has a profound admiration, and one of the works to which he has given his best attention is the splendid edition which he has brought out in collaboration with his friend, Mr. Ellis, of *The Works of William Blake.* Mystic calls unto mystic in this sequence of poet-example and poet-admirer; and when the exponent of Blake turns to Shelley, it is the mystical and symbolic elements which he admires, and which, as it seems to us, he over-estimates. In the essay on *The Philosophy of Shelley's Poetry,* he writes: "One finds in his poetry, besides innumerable images that have not the definiteness of symbols, many images that are certainly symbols, and, as the years went by, he began to use these with a more and more deliberately symbolic purpose. I imagine that when he wrote his earlier poems, he allowed the sub-conscious life to lay its hands so firmly upon the rudder of his imagination that he was little conscious of the abstract meaning of the images that rose in what seemed the idleness of his mind. Any one who has any experience of any mystical state of the soul knows how there float up in the mind profound symbols, whose meaning, if indeed they do not delude one into the dream that they are meaningless, one does not, perhaps, understand for years. Nor, I think, has anyone who has known that experience with any constancy, failed to find some day, in some old book or on some old monument, a strange or intricate image that had floated up before him, and to grow perhaps dizzy with the sudden conviction that our memories are but a part of some great memory that renews the world and men's thoughts age after age, and that our thoughts are not, as we suppose, the deep but a little foam upon the deep." Here, as elsewhere, we cannot escape the impression that we are listening to the follower, or, at least, the kindred spirit of Maeterlinck, and that, in this case, the thoughts of Maeterlinck and his kind are being accredited to Shelley.

It is to the essays on *The Celtic Element in Literature,* and *Ireland and the Arts* that one turns with the greatest interest, for these lead directly to the poet's own chosen field. "Here, in Ireland," he says, "when the arts have grown humble, they will find two passions ready to their hands, love of the Unseen Life and love of Country." And out these two passions this latest poet of Ireland has elaborated his whole fabric of story, poetry and drama. The two volumes, *The Secret Rose*

and *The Celtic Twilight* are simply collections of tales, the first drawn from ancient sources, the second from conversations with Irish peasants, to illustrate the two national passions. And if to some irreverent readers it may seem more appropriate to name the stories and their sources less grandly, yet no one can deny their quaintness and charm. The quality of humour which is conventionally associated with Irish tales, ancient and modern, is here rather surprisingly lacking. Even in incidents where the situation and dialogue provoke the mirth of the reader, he is conscious that the story-teller takes the matter seriously, with a self-conscious dignity which forbids laughter. The study of *Village Ghosts*, for instance, is, I take it, given as a serious illustration of Irish passion for the mysterious. It contains some really capital village ghost stories. Who could withhold the meed of an appreciative smile to the tale of Mrs. Montgomery, who *walked* after death, and appeared to a humbler neighbour? 'For a time Montgomery would not believe that his wife had appeared, "She would not show herself to Mrs. Kelly," he said, 'she with respectable people to appear to"'!

In *The Secret Rose* are many mystical old tales, told with singular beauty and sympathy. Some of them concern characters who appear again in the poems, where, however, they are somewhat robbed of their personality. It is indeed a little bewildering to be told in the notes upon some of the rather cryptic verses in *The Wind Among the Reeds*, that personages, made familiar by the earlier tales, Aedh, Hanrahan and Michael Robartes, are now not personages at all, but that "Hanrahan is the simplicity of the imagination, too changeable to gather permanent possessions, or the adoration of the shepherds; and Michael Robartes is the pride of the imagination brooding upon the greatness of its possessions, or the adoration of the Magi; while Aedh is the myrrh and frankincense that the imagination offers continually before all that it loves." Certainly the reader would need to be endowed with second-sight who could discover all this for himself, and in reading such passages one begins to realize the significance of the author's words about using symbols for years before one understands their meaning.

The Wind Among the Reeds contains a few pieces of singularly lovely verse, but is much over-weighted with notes. A great bulk of author's notes, while they may be interesting reading, can hardly fail to suggest weakness or obscurity in the poetry, even when it is not marred by these qualities. In Mr. Yeats's case one must take into account the fact that he is dealing with legendary characters not generally familiar to English readers. In spite of Lady Gregory's charming books, not many of us have any acquaintance with the Goddess Danu; to us the name of Fenians suggests something other than the followers of Finn; we have not followed the

doings of the Red Branch Kings, nor have we wandered in the Valley of the Black Pig. Till we learned it in the Yeats' notes, perhaps, we did not know that the *Sidhe* (shee) were fairies. Some notes then, are perhaps inevitable, but the habit of annotation carried to excess is fatal. With regard to symbols it is surely well to leave the reader a little freedom of interpretation. Even if he err, it seems better to err poetically than to have a lovely image broken by translating it into plain prose. Everyone remembers the shock of reading in the Tennyson Memoir, years after the Idylls had become a dear possession, that the Round Table meant "liberal institutions." So Mr. Yeats's elaborate notes on the rose as the symbol of "spiritual love and supreme beauty," while they give us some interesting mythology, do not strengthen the impression produced by the lines beginning "Far off, most secret, and inviolate rose," and by many other poems in which this lovely symbol is happily used.

The notes have been reduced to their due proportions and the poetry takes a higher range in the later collected volume, entitled simply *Poems,* among which are included two typical plays. There, "old, unhappy, far-off things and battles long ago" are presented with the high dignity which they demand, and there, "common things that crave" have also their meed of tender, haunting verse. The whole collection, with the exception of one or two Hindoo lyrics, is eloquent of Ireland. None but a Celtic spirit could produce these things, which, whether old or new, are full of the feeling of the unseen. "Fairies are a matter of course," as a worthy in *The Celtic Twilight* puts it. And the same peasant people who doubt nothing of the power of the fairies, speak with reverent familiarity of the Blessed Virgin and the saints. Within the narrow limits of successive verse-fragments — for many of the lyrics are very brief and slight — are delicately touched sketches where nature and man are brought into very close touch. The types which one cannot find are those which belong to the world, the conventional, or the self-seeking. Even patriotism seems too coarse a sentiment for these spiritual verses, for, though the poet seems sometimes to gird himself up to sing the pæan of the Irish Cause, the result of his effort is something very different from a campaign song. A set of dedicatory verses ends with a brief line of tribute to "men who loved the cause which never dies," but the lines preceding it are full of "Druid kindness" and "calm of faery." Again, a poem bearing the promising title, *To Ireland in the Coming Times* begins with an almost challenging vigour:

> Know that I would accounted be,
> True brother of that company.
> Who sang to sweeten Ireland's wrong,
> Ballad and story, rank and song.

But in the very next line the singer has to beg that he shall not be considered the less an Irishman because he has paid his *devoirs* first of all to the Lady Beauty; and the remainder of the poem is a mystical rhapsody, wherein Ireland is remembered solely as a place beloved of Beauty, and full of dreams and visions. "The horns of Elfland faintly blowing" could not less blatantly express the sentiment of the ordinary clamorous patriot "with a grievance," nor could they be much more delightful.

The emotions which are touched are given a singularly pure, sincere rendering in a poetic diction, as simple as Wordsworth's own, and sometimes more ethereal. The lines to *The Lake Isle of Innisfree,* which won Stevenson's homage, are almost too well-known to require transcription, and yet one cannot omit them:

I will arise and go now, and go to Innisfree,
And a small cabin build there, of clay and wattles made,
Nine bean rows will I have there, a hive for the honey bee,
And live alone in the bee-load glade.

And I shall have some peace there, for peace comes dropping slow,
Dropping from the veils of morning to where the cricket sings,
And midnight's all a glimmer, and noon a purple glow,
And evening full of the linnet's wings.

I will arise and go now, for always night and day
I hear lake water lapping with low sounds by the shore;
While I stand on the roadway, or on the pavements gray,
I hear it in the deep heart's core.

The utterly simple lucidity of this, the quaintness of the specific touches, as that of the "*nine* bean rows," the grateful sincerity of its sentiment are characteristic of a whole group of poems. We find them again in *The Ballad of Father Gilligan,* the good priest, who, from weariness, fell asleep when he should have been ministering to a dying man, but was saved from his sin of omission because an angel was sent to take his place. The good old man in his gratitude speaks piously:

He who hath made the night of stars
For souls, who tire and bleed,
Sent one of his great angels down
To help me in my need.

He who is wrapped in purple robes,
With planets in his care,
Had pity on the least of things
Asleep upon a chair.

In the same group is a cradle song, simple enough for a baby's understanding, and yearning enough to hold a mother's feeling. Songs of lovers are there too: *The Pity of Love; The Sorrow of Love;* the quaint, charming fragment, *Down by the Salley Gardens*; and the delicate lyric, which seems like a sequel to *Innisfree, To an Isle in the Water*:

Shy one of my heart,
She moves in the firelight
Pensively apart.

. . . . .

Shy one, shy one,
And shy as a rabbit,
Helpful and shy.
To an isle in the water
With her would I fly.

In these poems of simple life and universal emotions we touch very often the mysteries of the unseen, and find nature still uttering the spells of an ancient religion. This is Mr. Yeats's interpretation of the "Natural Magic" of the Celt. He believes that fragments of an old, old mythology still cling about the woods and waters of Ireland, and, mingling with newer faiths, fill their land with Presences for the simple people whose understandings have not been hardened by convention nor made impervious to the speech of spirits. And it is because of his belief in this haunting memory that he addresses his poems and plays to peasants, and fills them with peasant characters, who speak of mysterious things in simple language. Such are the characters of *The Land of Heart's Desire,* an exquisite little play, turning upon the subject of a bride stolen away by the fairies. The girl is a dreamer, chidden by her mother-in-law, admonished gently by her father-in-law and the good priest, who wish her well; and loved generously, though without understanding, by her honest husband, whom she loves in return, and towards whom she has a half-consciousness of disloyalty in her longings for freedom and beauty — for the fairy life. She has been reading an old book, long hidden in the thatch, about the Princess Adene, who went into fairyland—

Where nobody gets old and goodly and grave,
Where nobody gets old and crafty and wise,
Where nobody gets old and bitter of tongue —

and in spite of threatening and kindness and love, she calls to the fairies and they come, singing unseen as her body falls and her spirit passes:

The wind blows out of the gates of the day,
The wind blows over the lonely of heart,

And the lonely of heart is withered away,
While the fairies dance in a place apart,
Shaking their milk-white feet in a ring,
Tossing their milk-white arms in the air;
For they hear the wind laugh, and murmur and sing
Of a land where even the old are fair,
And even the wise are merry of tongue;
But I heard a reed of Coolaney say,
When the wind has laughed and murmured and sung,
The lonely of heart is withered away.

A stronger, more complex drama, of a wider range of characters, and touching at more points the sensibilities of theatregoers, is *The Countess Cathleen,* a play which should be better known. The situation is that of a famine-driven Ireland — the period is not specified — when the peasants in their extremity are led into the temptation of selling their souls to certain emissaries of the Evil One, who offer much gold. The Countess Cathleen, a high and noble lady, her imagination well nourished by the ancient tales of her land, her conscience well instructed in all the truths of the church, is the presiding spirit of the country. She pours out freely both her goods and her prayers, but the famine does not cease. With her foster-mother, Oona, and her devoted harper, Aleel, she travels through her land, seeing everywhere only desolation and despair. Bodies are dying of starvation, souls are being hurried downward by the evil ministers who prowl about with their insidious offers. Yearning with pity for the woes of her people, this beautiful lady who has been all her life preparing for heaven, puts her soul into the hands of the wicked merchants, that its great price may buy relief for the stricken land. As she makes her renunciation, the spirits of the lost strain upwards, because one of the blessed is coming down to them; but they are disappointed, for the soul-seller in making the uttermost sacrifice has gained the uttermost reward, and is carried by angels to "the floor of peace." The moment of her passing is made the occasion of one of the clear little pictures in which Mr. Yeats sometimes recalls very vividly the manner of the English pre-Raphaelites:

The light beats down; the gates of pearl are wide,
And she is passing to the floor of peace,
And Mary of the seven times wounded heart
Has kissed her lips, and the long blessed hair
Has fallen on her face; the Light of Lights
Looks always on the motive, not the deed,
The Shadow of Shadows on the deed alone.

Mr. Yeats records that when this play was presented in Dublin, it was met with a storm of indignation from both religious and political devotees, because, to quote his own words, "I made a woman sell her soul and yet escape damnation, and of a lack of patriotism because I made Irish men and women, who, it seems, never did such a thing, sell theirs." However dubious its moral, *The Countess Cathleen* certainly deserved better treatment than it received in its author's country, for it is compact of the "spirit, fire and dew" of a poetic creation. There is a warmer passion in it, a more forceful appeal than in *The Land of Heart's Desire*. The pale green and primrose colours of the earlier play have flushed to the depth of roses and flame. A dramatic instinct has seized upon significant moments and made the most of them. When the Countess dies, Oona, to assure herself, holds a looking-glass to the lady's lips, and, seeing it unblurred, shrieks the heart-breaking truth. Aleel, the passionate minstrel, shivers the glass to pieces on the floor, crying out:

> I shatter you to fragments, for the face
> That brimmed you up with beauty is no more;
> And die, dull heart, for she whose mournful words
> Made you a living spirit has passed away
> And left you but a ball of passionate dust;
> And you, proud earth and plumy sea, fade out,
> For you may hear no more her faltering feet,
> But are left lonely amid the clamourous war
> Of angels upon devils.

The touch of quaintness, never far away in the Irish tales, comes perilously near to the grotesque sometimes in this play. The good priest, who has kept back some of the people from this unholy traffic, dies suddenly and his soul is seized and stuffed hurriedly into his bag by one of the merchants, who, in relating the incident to his brother, says:

> I thrust it in the bag,
> But the hand that blessed the poor and raised the Host
> Tore through the leather with sharp piety.

Later on, the tear in the bag becomes inconvenient, and the merchant explains that it came by the finger of Father John:

> I had thought
> Because he was an old and little spirit
> The tear would hardly matter.
>
> FIRST MERCHANT.
>
> This comes, brother,
> Of stealing souls that are not rightly ours.

The lines of deepest meaning are naturally given to the Countess Cathleen, whose philosophizing makes it plain that her sacrifice was made in no spirit of reckless sentimentality. Reproving an old peasant who has declared that God forsakes them, she says:

> Old man, old man, he never closed a door
> Unless one opened. I am desolate,
> For a most sad resolve wakes in my heart;
> But always I have faith. Old men and women,
> Be silent; he does not forsake the world,
> But stands before it modelling in the clay
> And moulding there His image. Age by age
> The clay wars with his fingers and pleads hard
> For its old, heavy, dull and shapeless ease;
> At times it crumbles and a nation falls,
> Now moves awry and demon hordes are born.

The walls of the Countess Cathleen's castle are hung with ancient tapestry, representing the loves and wars and huntings of Gaelic heroes. Not otherwise is the background of the whole of Mr. Yeats's verse-fabric. From those old gods and heroes he has drawn his deepest inspiration, in celebrating them he has his greatest success. They are to him what the Greek heroes have been to many English and Continental writers. Indeed, he links both, with fine audacity, in his lines:

> Troy passed away in one high funeral dream
> And Usna's children died.

Sometimes there seems an over self-consciousness in the poet's efforts, as though he were insisting too strongly on his right of revival, and requesting attention instead of beguiling it; but, again, he brings the old heroes to us in a way for which we can only be grateful. *The Shadowy Waters, The Wandering of Oisin, Fergus and the Druid* — to name only a few out of many dreamy and symbolic plays and poems — are built upon the old tales. In the last named, Fergus is made to voice a sentiment which one feels is the poet's own view:

> A wild and foolish labourer is a king,
> To do and do and do, and never dream.

Of all the heroic pieces, the one on *The Death of Cuchulain* (Cuhoolin), has the greatest force and vividness. The admirable brevity and directness with which this subject is treated can hardly be overpraised. It is, in its baldest form a striking tale. Emer, the wife of Cuhoolin, hears that her lord, long absent in war, has found a fairer

bride. She summons her son and Cuhoolin's, the young Finmole, and sends him to avenge her. In the contest of these two, the greatest fighters in Ireland, Cuhoolin, not knowing his adversary, kills him. Learning the truth, the invincible one goes mad, sets himself to the task of fighting the sea waves, and dies. It is a Celtic *Sohrab and Rustum*, and in this latest presentation, it moves so swiftly that its effect is irresistible. Thus, the couplets, which describe Finmole sent on his terrible errand, are fairly packed with significance:

> There is a man to die;
> You have the heaviest arm under the sky.
>
> My father dwells among the sea-worn bands,
> And breaks the ridge of battle with his hands
>
> Nay, you are taller than Cuchulain, son.
> He is the mightiest man in ship or dun.
>
> Nay, he is old and sad with many wars,
> And weary of the crash of battle cars.
>
> I only ask what way my journey lies,
> For God, who made you bitter, made you wise.

And the conclusion comes as swiftly:

> In three days' time, Cuchulain with a moan
> Stood up, and came to the long sands alone;
> For four days warred he with the bitter tide;
> And the waves flowed above him, and he died.

We have been told, until the tale has become a weariness, that our age is unpoetic, that ours is the time of the triumph of materialism, that our gods are the gods of acquisition, achievement, success. And because no divinity has ever lacked his appropriate hymn of praise, we have in our day heard triumphant strains in praise of acquisition, achievement, success. Songs in praise of Empire, songs of the deeds of men who have fought and endured, songs even of steam and electricity, the forces by which men have conquered — these have filled the air wherever there were English ears to hear. Such seemed to be the chosen verse of the modern Anglo-Saxon. But, fortunately for the Englishman, he has always to reckon with Ireland. The Celtic strain constantly reasserts itself. The obvious is followed by the mystical. After the "age of prose and reason" comes Coleridge with *Christabel*. The same year which saw the birth of the "laureate of the Empire," the poet whose most characteristic cry was "God send a man

like Bobbie Burns to sing the praise 'o steam," saw also the birth of the singer, whose "separate wisdom" led him to utter the far different strain:

> Red Rose, proud Rose, sad Rose of all my days!
> Come near me, while I sing the ancient ways:
> Cuchulain battling with the bitter tide;
> The Druid, gray, wood-nurtured, quiet-eyed,
> Who cast round Fergus dreams, and ruin untold;
> And thine own sadness, whereof stars, grown old
> In dancing silver sandalled on the sea,
> Sing in their high and lovely melody.
> Come near, that no more blinded by man's fate,
> I find under the boughs of love and hate,
> In all poor foolish things that live a day,
> Eternal beauty, wandering on her way.
> Come near, come near, come near — Ah, leave me still
> A little space for the rose-breath to fill!
> Lest I no more hear common things that crave;
> The weak worm hiding down in its small cave,
> The field mouse running by me in the grass,
> And heavy mortal hopes that toil and pass;
> But seek alone to bear the strange things said
> By God to the bright hearts of those long dead,
> And learn to chaunt a tongue men do not know.
> Come near; I would, before my time to go,
> Sing of old Eire and the ancient ways:
> Red Rose, proud Rose, sad Rose of all my days.

To us with the whole volume of English poetry in our hands, this is not new, but the recurrence of a strain long known. It may ring strangely in the ears of a generation accustomed to a louder, more clanging music, but it will find its way to those for whom it is meant.

SUSAN ELIZABETH CAMERON.

THE PRINCIPLE OF UNITY IN ART.

The feeling for æsthetic arrangement is ultimately irrational. Like the agreeableness of mild sunlight or the discomfort of summer heat, it is an immediate fact of psychological experience. The pleasure one finds in pure, diffused light is not dependent upon knowledge of the hygienic value of sunshine, nor is the quality of pain related to its significance as a warning of injury to the body-tissues. The experience retains its flavour as fully when one is ignorant of its bearing upon the general functions of life as when one is most completely aware of such connections. Nor is the fact of æsthetic preference the result of an intellectual analysis of experience. The object gives delight neither in virtue of the recognition of its utilitarian value, nor through the perception of simplicity in the structural laws which it exhibits. The object may be useful; it may be necessary to life; it may present simple relations among its elements; but the æsthetic quality of the impression which it makes does not depend upon an awareness of any of these relationships. Why pleasure should arise at all in connection with our contemplation of the world we cannot say. Like and dislike, delight in one set of objects, or its grouping, and aversion to another are irreducible facts.

On the other hand, though the experience of æsthetic delight cannot be analyzed into simpler motives, the conditions which an arrangement of objects must fulfil if it is to arouse that emotion may very well be defined. These preferences are not capricious moods of feeling among which no agreement can be found, but types of selection in which the individual is conscious of stability in his judgment and receives a large measure of social gratification. The subject-matter is such as to permit the formulation of canons of taste, and to enable the artist to compose his materials in systems which shall give, not to one but to a multitude of beholders, the impression of beauty and grace. These formal condi-

tions may be summed up under the principle of the unification of diverse material, which is most readily illustrated by the laws of pictorial composition.

Every picture, whether it be wrought by an artist with brush, pencil or graver, or be presented by the unmodified sensible world, is the result of an activity of selective consciousness and composes an ideal unity. The truth of this will readily be granted with regard to the creative work of the artist; its applicability to beauty in natural objects will very probably be denied. Yet, every vista and grouping which affords æsthetic pleasure is as truly the result of selection and arrangement as are the figures grouped in an historical painting, the incidents of a drama or the succession of tones in a melody. Not every group of objects constitutes a picture, though any group may be pictured or represented. The causes which operate to bring things together in natural arrangements, on the one hand, and in artistic, on the other, are absolutely unlike, and can therefore have only accidental resemblance. The one grouping is due to conscious selection in the service of an ideal of the imagination; the other is brought about by the co-operation of forces directed to ends unrelated to æsthetic effect. One may see the figure of a man or a dragon in the clouds, but their vapour does not thus shape its masses in order to present the appearance of a human being or a monster. The phenomenon is a fancied or accidental one.

In certain romantic and mystical moods one does, indeed, conceive the world and experience in a very different fashion, as Stevenson, in *The Merry Men,* makes the conscience of the self-accusing Islesman discern sinister letters in streakings of the water left by the movements of a sluggish tide. These markings may be regarded from two points of view; either they are blindly produced by mechanical changes in the flowing of the water — in which case one only fancies the phenomenon, and the letters as the significant product of a purposeful consciousness, are not there at all; or else one regards the appearance as an omen, in which case the letters are really there, in the sense that their origin and significance are identical with the operations and expressions of the apprehensive soul which views them.

Likewise, in regard to groupings of natural objects which are called beautiful, one may look upon the arrangement as the outcome of purposeless physical changes, or regard it as the result of an activity consciously directed toward the production of an æsthetic effect. Only under the latter conception has one the right to call the composition really æsthetic in its nature. Now, one certainly does find in nature vast numbers of vistas and groupings which fulfil the formal conditions imposed by the canons of taste, and it is inconceivable that in any con-

siderable degree the chance arrangements resulting from blind physical causes should simulate systems determined by the æsthetic relations of their constituent parts to one another. All such beautiful arrangements of light, colour, forms, objects and distances are indeed the creation of an artistic consciousness working directly toward the production of an æsthetic effect; a consciousness, however, which is not, as in the romantic or mystical view of the world, to be attributed to some divine fate or purpose, but is the constructive imagination of the human percipient himself. In nature there is no sifting of materials, no preservation of harmonious elements and elimination of the incongruous. The appearance of æsthetic relations depends always upon inner accentuation through which the continuity of presented experience is dissolved and its elements reorganized in an ideal order. The existence of the picture depends upon the embodiment of the same principle which gives form to the musical phrase and to the drama, namely, the feeling of artistic unity which pervades the whole composition. Each constituent is present because it is a significant member of an organic whole.

It may be objected that if the conditions which the beautiful object must fulfil be thus rigid, the cases in which natural objects can be made the material for such a synthesis must be rare indeed; while, as a matter of fact, there is no natural grouping which, from some point of view or other, cannot be regarded as satisfying, but remains obstinately and finally ugly. It is true that if one simply opens his eyes and looks at the world he will find it difficult to discover any field of view which is not capable of yielding pleasure in some degree. But the fact that one can thus find satisfaction within any presented field does not mean that natural arrangements are always or characteristically pleasing; it means only that the function of æsthetic selection is always and characteristically present in one's perception of the world; it means only that the human mind wills always to create beauty, and that in the fulfilment of this purpose it treats the material of presented experience with the utmost freedom. Attention is never diffused indifferently over its object, but is constantly engaged in altering and reconstructing the field before it.

It is thus that the undifferentiated series of sounds is apprehended as a rhythm, that out of the tumbled masses of the clouds one constructs men and countries, and in the crystallization of frost on a window-pane perceives flowers and landscapes. The attentive eye accomplishes for æsthetic sight what the hand does for hearing when it strikes those keys whose sounds produce a harmony. Of the vast number of possible combinations the skilful fingers pass by those which do not belong together in the unity of a musical chord, and strike only such as are consonant with one another. Out of the indifferent many is thus con-

structed a system of significant and related elements, the form of which had no place in the key-board arrangement, but existed only in the harmony-loving soul of the player. The world of visual perception is likewise without form. All points of view are possible. Congruities and incongruities, proportion and its opposite, the beautiful and the ugly are potential within the limits of its indifference; but until perception seizes upon and synthesizes a group of elements which æsthetically form one system, as the musical notes constitute a chord, neither disproportion nor symmetry, neither unity nor incongruity has any existence. The picture, as an arrangement of material, is literally created by the consciousness which apprehends it.

The special nature of æsthetic unity is itself, of course, a problem to be solved. One must be able to state in some fashion what are the criteria of its presence, what principles must be observed in order that the sense of unity may be satisfied. But whatever be the specific answers to these questions, the fundamental place of this sense in æsthetic apprehension cannot be questioned. However complex its application to the manifold concrete materials with which the artist deals, the form of his product must be determined by a single principle of selection. Every element is chosen and incorporated because it is an organic member of the total group necessary to the production of the ideal effect as it exists in the mind of the artist. In the perfect work of art nothing is present which is not an intrinsic part of the concept; and nothing which is essential to the embodiment of that concept can be lacking from it. There is no region of indifference in æsthetic composition in which elements may be embodied or ignored without affecting the purity and force of the impression.

The limits which the artist's ideal imposes upon his work may be transgressed in either of two directions, by way of defect, and by way of redundancy. He strives for adequacy of expression through means of the utmost simplicity. If any necessary element be taken away, it weakens the impression; if anything inessential be added, it confuses the effect. The artist must so embody his ideal forms that swift, successful apprhension shall be possible, while, at the same time, room is allowed for the free play of constructive imagination on the part of the beholder.

The vice of deficiency occurs wherever the artist's purpose is not sufficiently indicated in his work. The attitude of the observer should be fundamentally receptive and appreciative. The direction in which his constructive imagination is to move in the completion of the suggested form should be put beyond question. When too few elements are given the variety of possible interpretations which the sketch may receive embarrasses the beholder with alternatives. He halts among

many choices, and friction or inaction arises where the conditions of satisfaction demand a swift and unequivocal synthesis of forms immediately apprehended and accepted.

Nor, on the other hand, can more be put into a composition than an adequate expression of the ideal calls for without thereby detracting from its perfection as an art product. Elements may not be added at will because of values which they happen to possess in themselves. The beauty of the composition as a whole is of commanding importance and must prevail over and give final worth to every element within it. The art-product represents one dominant idea, the significance of which must determine what each constituent part shall be, as the total meaning of a sentence determines what words shall appear within it and in what order they shall stand. No refinement of detail, no exquisiteness of finish can atone for lack of coherence in the composition.

There is a vice which attempts to supplement a deficient vision by redundancy in the material of expression, with disastrous results. The work in such a case lacks definition and force; it is obscure and difficult to understand; it fails to impress and satisfy, simply because it is a confused presentation without coherence or unity. The artist who thus possesses no clear concept seeks characteristically to hide the defects of his work by the elaboration of insignificant detail, by which attention is diverted from the composition as a whole. Over-ornamentation is everywhere the mark of false and degenerate art. The one thing needed in composition is the presence of a strong beautiful central idea which shall unite the constituent elements into a consistent whole. This idea must be luminous and forcible; the beholder should apprehend the general purpose and plan of the work at the first impression. Elaboration tends to confuse this effect. Through the introduction of a great number or variety of objects the unity of the picture is let slip. When the essential simplicity of the idea, which should shine out at once through all detail, is thus lost in the midst of a complex manifold, the swift apprehension of meaning which is fundamental in all æsthetic enjoyment becomes impossible. To express oneself adequately is the first canon of art, and the second is to attain this expression by the simplest possible means. Restraint is imperative in art as in morals, and it is to be doubted if any idea which is adequately set forth by a given means can be perfectly expressed by a more complex set of symbols.

A picture, then, consists in the embodiment of a central idea with whatever accessories the artist finds necessary to reinforce and enrich it; it depends for its existence upon the presence of a definite principle of organization. This principle must be single. Two independent ideas make two pictures, and should not be brought together within the same

frame. Subordinate groups there may of course be, and in many gradations of relationship, but each one of these must be a functional part of the composition, contributary to the single central idea. One may, indeed, abstract from the picture as a totality, and regarding one such subordinate group by itself, may find pleasure in its isolated contemplation; but when no such dissolution of the unity of the picture takes place through concentration of attention upon a limited portion of the composition, each of these groups must find the justification for its introduction in some significant relation which it bears to the dominant concept. Ultimate dissociation cannot exist in an object of æsthetic contemplation. There must be a centre which the eye and the attention instinctively seek, in which they tend to rest at each return from exploration of the eccentric portions of the composition. Though fundamental rivalry of the attention is thus prohibited, its constant fluctuation is stimulated in proportion as the picture is noble and perfect in its nature, its dignity being proportional to the complexity of the motives which are united in a single æsthetic synthesis.

The unsatisfactoriness of composition in which a single principle of organization has not been observed is immediately felt. When two or more dissociated centres of interest are introduced within the same formal limits the attention is suspended in a meaningless oscillation. The æsthetic judgment, when directed to either of these points, seeks an interpretation of the whole composition on that basal idea, and in passing to the second point tends essentially to regard it as contributary to the first. But, instead of finding such subordination, it is compelled to conceive the latter as the centre of an independent system, having no functional relation to the first. There thus occurs a constantly repeated shock of disappointment as attention passes from the one object to the other. The point of view must be fundamentally changed at each transition instead of being enriched by a new set of intelligible relations. Such a condition is subversive of the very attitude of æsthetic contemplation. The artistic object affords satisfaction by embracing within its limits the reciprocal of every element. Expectation must not run beyond the bounds of the object, but be constantly reflected back within it to find fulfilment. Æsthetic contemplation reaches such an equilibrium only when there is one paramount idea about which takes place an oscillating play of subordinate relations.

In other words, the unity which an art-product presents must be synthetic. Transition is no less essential to æsthetic contemplation than restfulness. At the basis of all our permanent delight in works of art lies the capacity of the artistic object to recreate interest by making possible a series of transitions from one point of view to another.

Refreshment of stimulation must constantly take place. Without recurrent change, we are told, the stimulus ceases even to arouse sensation. The perception of an object, also, must constantly be renewed if it is to remain in the focus of consciousness. We can dwell upon these topics of thought only which develop in the mind, concerning which fresh aspects and relations emerge moment by moment. Still more must this perpetual transition and streaming take place if that novelty of impression and freshness of value which underlies all æsthetic delight is to be maintained.

In the pleasure aroused by an æsthetic impression two factors are to be discriminated, the material and the form. In regard to the former the mind is passive; it does not create the differences in colour, form, mass, illumination and the like, which the picture presents. The interpretation of this content, on the other hand, its apprehension in a particular form, is a contribution by the apperceiving mind. According as the values of either or both of these factors fluctuate will the quality of the resulting impression vary. When the content is of extreme simplicity, as in the case of uncomplicated geometrical symmetry, the impression it affords is pure and pleasurable; but the process of perception, being simple, is soon over, and the satisfaction in beholding such compositions rapidly passes away. For the pleasure of beholding any object, apart from the sensuous apprehension of its material beauty,— the purity and intensity of its colouring, for example,— is the concomitant of this very process of apperception and nothing else. It is pure in proportion as the mental synthesis is swift and frictionless; it is intense in proportion as the materials unified are many and diverse. If the content be not manifold, the pleasure is weak and fleeting; if the synthesis be not rapid and easeful the experience is mingled with pain. The work of the artist is thus noble in proportion to the complexity of the materials which he successfully co-ordinates in a single system, for we rightly look upon those canvases in which the greatest number and diversity of elements are combined to enforce and illustrate a single theme as the surpassing triumphs of art.

ROBERT MACDOUGALL.

SOME REFLECTIONS ON SHAKSPERE'S "JULIUS CÆSAR."

Not long ago I happened to be in conversation with a friend whose knowledge of French life and French literature is unusually wide and varied. The conversation turning on the difference between the type of drama brought to perfection by Shakspere and the other type brought to still higher perfection by Racine, my friend made the striking remark that of all the more important plays of Shakspere *Julius Cæsar* is the most "French" in design and execution. This remark made a strong impression on me, and it struck me that it might not be a waste of time to spend some half-hour in the attempt to answer the questions, what are the points in which Shaksperian and classical French tragedy differ, and how far it is true that *Julius Cæsar* presents more resemblance to the French type of drama than other works of Shakspere. There are two ways in which an inquiry of this kind seems likely to be of some use to us as lovers of fine literature. It may help us to a better appreciation and fuller enjoyment of the consummate literary art of Racine than is customary among Englishmen, who are, as a rule, debarred from the due understanding of that noble poet by sheer misapprehension of the artistic ideals which he had before him. And, again, the insight we may gain into a conception of the function and scope of tragedy, which in some fundamental characteristics differs from Shakspere's, ought indirectly to throw fresh light on Shakspere's own tragic methods and ideals, and so help us to a clearer comprehension and worthier enjoyment of the supreme literary treasure of our own race and language. Fully to appreciate either Racine or Shakspere would no doubt be a task for a lifetime, and for a genius only second to their own, yet, if we are not afraid of a little discursiveness and apparently arid literary history, we may, I think, even within the compass of a single essay put ourselves at the right point of view for such an appreciation.

In attempting to understand the modern drama, as in most of the problems of science and art, we at once find ourselves compelled to go back to the beginnings of all Western civilization among the Greeks. Tragedy, in particular, seems to be essentially a product of Hellenic genius; it has never, so far as I know, taken deep root among any peoples who have not come directly under the influence of Greece and her literature, and, on the other hand, has never failed to make its appearance wherever the Greek influence has been strongly felt. The Semitic races, remarkable as their power of developing a varied civilization has been, never, so far as I know, possessed a dramatic literature. It is even said that when Averroes translated Aristotle's treatise on poetry into Arabic he was at an entire loss to know what could be meant by the "tragedy" which Aristotle regards as the most perfect form of poetical composition, and made the greater part of the work unintelligible by confusing it with the Arabic panegyrics in honour of princes. In the Western world, on the other hand, the filiation of English, French and Spanish drama has been carefully made out by the historians of literature, and it has been clearly shown that, whatever rude potentialities of the tragic act may have lain dormant in the popular "mysteries" and "moralities," the intellectual impulse to the creation of a genuine drama has in every case come directly or indirectly from the study of Hellenic models. This is especially the case, as will appear directly, with the French classical drama, which reached its final perfection of form at the hands of Racine in the seventeenth century. Thus, for the proper understanding of Racine and, by contrast, of Shakspere, we are thrown back upon the question, what were the ideals of the type of drama, created by the Athenian tragedians of the fifth century B.C.; and stereotyped for French imitation by the philosophical analysis of Aristotle's *Poetics*. For Aristotle's theory will speedily be found to be based upon Greek tragic practice, and Racine and the French classical drama as a whole will no less readily show themselves to be based upon Aristotle's theory. Shakspere, on the contrary, will offer us a new type of drama aiming at ideals unrecognized by Aristotle, and demanding a wider and deeper æsthetic theory for complete understanding.

Now, the first point of interest that must be noticed in reference to the history of the dramatic type which became, through the influence of Aristotle, the ideal of the classical French school, is that it is as good as the creation of the genius of one man. In all that relates to the essential character of the tragedian's aims and of dramatic construction, tragedy, as understood by Aristotle and his French disciples, means the tragedy of Sophocles. Indeed, one might almost go a step further, and say that both to Aristotle and to Racine, tragedy means, in all essentials,

the *Œdipus, the King,* which ancient and modern critics alike have consented to regard as Sophocles' masterpiece. In Shakspere, as we shall presently see, tragedy means something very different, something more, no doubt, but also assuredly something less. And our one chance of getting to know what that something more and something less which distinguishes masterpieces like *Lear* and *Antony and Cleopatra* from masterpieces like *Athalie* and *Phèdre* lies thus in obtaining a clear notion of the characteristic feature of the type of tragedy invented by Sophocles.

The understanding of this matter has unfortunately been rendered exceedingly difficult by the current assumption that there was one single type of tragedy recognized in the Greek world and cultivated with varying degrees of success alike by Æschylus, by Sophocles, by Euripides. As a matter of fact, however, there is a difference of artistic aim and method between the tragedy of Æschylus and the tragedy of Sophocles only less profound than that which divides the drama of Shakspere from the drama of Racine. Indeed, in most of the important points in which Shakspere differs from the popular conception of "Greek" drama Æschylus will be found to be on the Shaksperian rather than on the so-called classical side. To begin with, Æschylus, by the device of exhibiting three connected plays on the same subject together, was able to bring, like the Elizabethans, the whole history of a man or family within the compass of a single dramatic performance. He was thus able as none of his Greek or French successors have been able, to exhibit the growth of character under the pressure of a long-continued train of events. Nowhere out of Shakspere would it be easy to find a finer dramatic example of the gradual development of character than has been provided by Æschylus in his treatment of the character of Clytemnestra in the three plays on the story of Orestes. In the *Agamemnon* we have the queen exhibited to us at any rate so far "young in deed" as to be constantly on the verge of betraying her own false and murderous intentions by the suspicious glibness and plausibility of her fictions; in the *Libation-Pourers* she has grown stronger as well as harder; as she stands face to face with the son who has returned of set purpose to avenge his father's death, she is no less daring and fearless than when, in the earlier play, she had stood in the sight of the elders of the city a self-confessed murderess beside that father's dead body; but there is now none of the hysteria which had mingled with the audacity of that former appearance. She must die, slain even as she slew, and she knows it; yet there are now no long-drawn or fevered pleadings for life, no extravagant appeals to Heaven to witness to the justice of the old revenge. One last brief plea for life is put forward and rejected, and then, assuredly with no

less than heroic composure and fortitude, she goes in silent dignity to her doom. In the final play of the three, the *Eumenides,* we are taken a step further yet; Clytemnestra appears or rather her wraith appears even after death to demand vengeance on the matricidal son and to reproach even the untiring Furies with slackness and apathy in the quest for blood. And the superhuman combination of fiery unforgetting passion with the sternest self-repression and brevity of speech displayed by the wraith of the great queen comes as a revelation to us even after what we have seen of her in the moment of her death. If she was great in the hour of her triumph, greater and stronger is that of her fall, she is greatest and most terrible of all in this last mysterious appearance as of a voice crying for blood even from beyond the tomb.

And as Æschylus resembles Shakspere in his power of portraying development in character, so too in his wonderful gift of realistic humour. Those who think of the father of Greek tragedy only as the dramatist of Prometheus and Apollo and Athena and the "other god-like forms and shades excelling human" shut their eyes to at least half of his mighty gifts. There is hardly a play of the seven which have come down to us in which there are not unmistakable evidences of a humour at once tender, broad and strong, and in more than one of the seven we are brought very near the borders of downright farce. The blustering Egyptian herald of the *Suppliants* strikes me as being of the same kin, and not at many removes, as that immortal ruffler Ancient Pistol; the quaint old watchman and the voluble herald of the *Agamemnon* with their homely proverbial wisdom and their eloquence about the minor material discomforts of life would hardly be out of place in the company of Captain Cuttle and Mrs. Nickleby, while as for the half-crazy garrulous old Muse who prattles to us in the *Libation-Pourers* about her troubles with Orestes' feeding-bottle and baby linen, one can only avow one's firm conviction that somewhere in the obscure purlieus of Elysium she proves a worthy third in the society of Juliet's nurse and the late-born, but no less immortal, Mrs. Berry. What might have been the history of Greek tragedy if the mantle of its great creator had fallen upon a successor of equal skill in the delineation of character and equal gift of realistic humour it would be difficult to say, but it is hardly presumptuous to hazard the guess that if Athens had produced a second Æschylus the world might not have had to wait two thousand years for *Lear* and *Macbeth.*

As it was, however, the inheritance of Æschylus was taken up by one who was perhaps not less richly, but certainly very differently endowed by Nature, and the result was the creation of the type of drama which we commonly know as "Greek," but ought, more accurately to

call Sophoclean. Let us see briefly what were the special characteristics of the new form of art. In the first place Sophocles all but eliminated from tragedy the element of farcical comedy which is so prominent in Æschylus. In the *Antigone,* indeed, Sophocles has introduced one character, a county constable, who may be regarded with some plausibility as a distant relative of Dogberry for amusing ineptness and self-importance, but this worthy can scarcely be paralleled from later and maturer plays. In *King Œdipus* and *Philoctetes* every trace of the comic and farcical has fallen away, and we have pure tragedy unrelieved. But the most important change introduced by Sophocles, a change which has incalculably affected the development of ancient and modern drama, was the abandonment of the older practice of producing plays in connected series. "Sophocles," say the ancient authorities, "set the fashion of competing not with trilogies but with single plays." In itself this statement may appear unimportant, but we shall soon see its bearing upon literary history if we reflect that it really means that Sophocles invented the single-situation tragedy. Henceforth the exhibition of the growth or degeneration of character ceases to be the tragedian's aim, until Shakspere, by pure force of native genius, restores to tragedy the full scope and more than the full scope it had enjoyed in the hands of Æschylus. Within the somewhat narrow limits of a Greek tragedy in which the continuous presence of a chorus made the confinement of the scene to one and the same spot, and the restriction of the time of action to a few hours almost inevitable, continuous evolution of character could only be represented, after the fashion of Æschylus, by the simultaneous production of several connected plays, each of which formed as it were one act of a large drama. With the abandonment of the system of trilogies, a restriction was thus set upon the aims and ideals of tragic art. From the time of Sophocles on, the function of the tragedian came to be not to trace the formation or the degeneration of character, but to exhibit fully-formed characters in a situation specially adapted to display their strength and weaknesses. Tragedy in fact was by Sophocles, consciously or not, made statuesque, not in the sense of being emptied of human interest and emotion, but in the sense of being restricted to the representation of a single moment or situation, pregnant with important moral issues and serving as the turning-point in one or more careers.

The most perfect example in Greek literature of the mingled strength and weakness of such a "single-situation tragedy" is afforded by Sophocles' one masterpiece, *King Œdipus.* We can all imagine the way in which a dramatist of the Shaksperian school would have handled the legend of the mysterious birth, the wisdom, the strange success and

strange message of the son of Laius. We should have been given pictures of Œdipus in the Corinthian court, recognized by all as the heir to the throne, then of Œdipus as exiled and obscure wanderer, then of his splendour and renown as conqueror of the sphinx and King of Thebes, and finally of his calamitous fall. The tragedian would before all things have found his account in tracing the effects of so strange a succession of experiences upon the formation of his hero's character, and would probably have introduced more than one episode, unconnected or only connected in the loosest of ways with the march of the plot, in order to illustrate the mental development of Œdipus from every conceivable point of view. Had he been one of the stronger Elizabethans, his canvas would probably have been further filled in by the introduction of a comic or satiric element so as to present a fairly comprehensive picture of human aspirations and human foibles as seen by the dramatist. Now, mark how different from all this is the procedure of Sophocles. The whole action of his play is compressed into the few hours immediately preceding Œdipus' fatal discovery of the truth about himself. The curtain rises upon the morning of the day on which a message is expected from Delphi revealing the reason of the wrath of heaven against the plague-stricken city of Thebes. Before that day has come to an end it has been revealed that the offence which calls to Heaven for vengeance is the long unavenged slaughter of the late king; Œdipus in his zeal to discover and punish the offender has himself forced from unwilling witnesses the truth that the murderer was no other than himself, that his victim was his own father, and that he has been for years living in inconceivable wedlock with his own mother; in their horror at the discovery, the queen has laid hands upon her own life, and Œdipus has put out the eyes for which all the sights of earth have suddenly grown hateful and hideous. The interest of the spectator has been aroused, not by the slow moulding of character by circumstance, but by the exhibition of the full strength and weakness of a proud self-reliant character under the stress of a few crowded moments which strain it to the utmost and reveal in quick succession all its vigour and strength and all its latent weaknesses.

To realize the immense difference of spirit between the Sophoclean tragedy of the single situation and the Elizabethan tragedy of slow and gradual evolution we have only to imagine a typical Shaksperian tragedy, *Hamlet*, for instance, remodelled on the Sophoclean plan. Suppose that the whole action of *Hamlet* had to be compressed into the few hours immediately preceding the duel with Laertes and to be represented without a single change of scene. It is clear that by such an arrangement we should lose much of the philosophic power and depth of the Shaks-

perian play. There are sides of Hamlet's complex and chameleon-like temperament of which we should have to be left ignorant. The reflective sardonic humour of the graveyard scene, the suggestive criticism of the scene with the players, much of the wild mockery of those scenes with Polonius, in which Hamlet shows how much of the savage there was under his scholar's gown, would have to disappear from the amended play. Worse still, we should lose the power of watching the way in which Hamlet's mocking, distrustful mood gradually grows upon him and makes havoc of all the relations of life. Hamlet, as we should know him from a drama constructed on the Sophoclean plan, would be a creature singularly simple in mental constitution and curiously free from contradiction as compared with the sphinx-like being whom Shakspere has made familiar to us. But then, on the other hand, how much the Shaksperian play would gain in closeness of structure and freedom from irrelevancies by such a compression. What a gain in workmanship if no incident but such as led directly to the catastrophe were admitted into the plot, if the past history of the characters, instead of being set forth chronicle fashion on the stage, had to be made apparent in the course of the single main action, if Rosencrantz and Guildenstern and the rest of the personages who only exist in order to give Hamlet an opportunity for exhibiting aspects of his character which have, after all, little to do with the catastrophe of the play, were relegated to limbo, if Hamlet's eternal tendency to substitute reflection for action had to be shown once only and then with all the power of the tragedian's art, instead of being more or less satisfactorily exhibited half a dozen times! In short, we may say that if the Sophoclean restriction of tragedy to the exhibition of a single dramatic situation is a bad thing for tragedy regarded as a complete artistic presentation of human life and human character it is a good thing from the point of view of intensity, concentration of aim and finish of workmanship. The Shaksperian tragedy of development aims at results that lie far beyond the reach of the single-situation drama, but then it allows itself, in achieving them, a diffuseness of exposition, a carelessness of construction and a general artistic slovenliness which would be fatal to a worker in the more contracted field.

Now, witness the Sophoclean single-situation tragedy which became, as I have said, the model for subsequent Greek dramatists and the ideal of Aristotle and through him of Racine and the French classic drama generally. Euripides indeed returned, in respect of the admission of comical and farcical elements into tragedy, to the more unrestricted Æschylean model, and exhibited in such plays as the *Alcestis, Orestes* and *Electra,* specimens of an admirable satisric humour, which has been oddly misunderstood by readers, who insist on judging all Greek plays

by the Sophoclean standard. It was not, however, in this respect, but in another way, entirely unconnected with the general form of the drama, that Euripides influenced the subsequent development of tragedy in the modern world. He was the first great poet who systematically treated the transports, joyous or despairing, of romantic but guilty love as a proper theme for the stage. In this, as in his fondness for elaborate rhetorical pleadings of cause against cause, he was closely followed by the French dramatists, but in all that concerns the essential form of tragedy it was Sophocles as interpreted by Aristotle whom they took as their master. The famous account of tragedy given by Aristotle in the *Poetics* reaveals itself, on the least critical examination, as having in view from first to last such a single-situation drama as that invented by Sophocles. This is particularly clear in Aristotle's well-known demand that tragedy shall observe the unity of action, or, as he phrases it, shall represent a single action, having beginning, middle and end. As explained by the philosopher himself, this means that the subject matter of a properly constructed tragedy must be the incidents directly leading up to or resulting from a single intensely dramatic moment in which opposing characters stand fully revealed in their strength and their weakness. Whatever does not immediately lead to or issue from such a dramatic moment (called by Aristotle *περιπέτεια*, or turning of the tables) lies, "outside the action," and if referred to at all, must be worked in indirectly by allusion and variation, not directly presented in action. In the same way "episodes," that is, scenes not necessary to the understanding of the principal situation, but inserted for their own interest as throwing a sidelight on the characters of the actors, are regarded by Aristotle as altogether artistically censurable, and Euripides comes in for a great deal of blame for indulging in such inelegancies. In Aristotle's opinion, character, so far as it needs to be shown at all, ought to be exhibited in the principal action of the play, and it is a sign of incompetent workmanship if the playwright has to illustrate it by means of otherwise superfluous scenes. In fact, he even maintains that characterization is of secondary importance as compared with plot or incident, an estimate of the relative importance of the two things that must at first appear singularly perverse to those of us who are familiar with the Shaksperian combination of deep insight into human nature in all its aspects, and masterly characterization, with slovenly and ill-constructed plot.

Now, the ideal which the tragic dramatists of France deliberately set before themselves, and which Racine by common consent has reached more nearly than any man before or after him, was that of the perfectly constructed single-situation drama, as invented by Sophocles, and sub-

jected to philosophical analysis by Aristotle. Indeed, the French critics of the seventeenth century went further even than their Greek masters in the direction of limiting the scope of the drama to the presentation of a single situation of paramount and breathless interest. The final step in this process of combined limitation of outlook and intensity of vision was achieved when the so-called "unities" of the drama were enthroned as rules from which no exception was on any account to be permitted. The "unities" in the sense put on that word by the French men of letters of the period of Boileau and Racine, were indeed unknown alike to the Greek stage and to Aristotle. Though changes of scene were for obvious reasons rare in post-Æschylean drama they were by no means unknown, as we see from the *Ajax* of Sophocles where the scene of action is suddenly transferred from the Greek camp before Troy to the dark and silent grove in which the striken hero falls on his own sword. And though the presence of the chorus all but compelled the limitation of the imagined duration of the action to that compass of natural day which Aristotle thought sufficient, instances are not wanting where (as in the *Eumenides* of Æschylus) a considerable period is supposed to elapse between the scenes. According to the strict French rule, on the other hand, the imagined time of action must be no longer than the actual time taken up by the representation, and the places represented must lie sufficiently near together for the persons of the drama to pass between them in that time. In other words the scene must be practically unchanged and the action represented must be such as could take place within at most some three or four hours.

The extraordinary difficulties under which the dramatist was placed by regulations of this kind must at once be apparent. It is true that light and farcical comedy need not suffer much from the imposition of the "unities" upon it, as is amply proved by the example of the *Tempest*, in which Shakspere has for once followed the rigid French rule, as well as by more than one of Ben Jonson's greatest works. But with tragedy the case is quite different. It would be in vain to ask profound delineation of character or life from a writer who is, by the rules of the game, compelled to show no more of the character of his personages than might, in real life, be exhibited in the actions of a couple of hours. The adoption of the strict French interpretation of dramatic unity thus amounts to a definite selection of the interesting situation as against the profound and comprehensive portraiture of life as the one proper object of dramatic representation. The external differences between the French classical play with its dozen or so of characters, its unchanging scene and imaginary duration of a few hours, and the Shaksperian drama with double the number of persons, with the utmost liberty of change of scene and an

imaginary duration which may extend to years, striking as they are, are but signs of a much deeper and more fundamental divergence of aim and ideal. The Shaksperian ideal, as we know from Hamlet, was " to hold the mirror up to nature . . . . and to show the very age and body of the time his form and pressure," in other words, to fill the canvas with a picture at once moving and profound of the life and character of a period of human society in its widest extent. The " unity " of the drama for Shakspere means no more than the internal consistency of such a picture, and so long as this inner unity is faithfully preserved, any amount of repetition, of irrelevant action and of unnecessary episodic scenes may be inserted into the play at pleasure.

To the French dramatist, on the other hand, character, except as it exhibits itself in the actual moment of the brief crisis which is all the rule of art allows him to represent on the stage, is of no importance. His object is to portray not character as wholes, but passions, that is, isolated moments of intense excitement and emotion. In a classical French drama, restricted narrowly within these limits, it would be a positive fault if the character drawing were too profound and complex; the very attempt to make a man exhibit every side of his nature in a situation supposed to last only an hour or two would be to outrage probability and reason. Hence it is that the most famous characters of the classic French drama seem to an Englishman to lack individuality. Phèdre and Athalie, he would complain if he put his secret thought into words, are, after all, only the typical jealous woman and the typical bold, bad woman with a label attached to them; Lady Macbeth and Hamlet's mother are concrete personalities. This is, of course, true so far as it goes, but when our ordinary Englishman proceeds to reproach Racine with inability to create anything more real than these general types, he forgets that the very conditions of the single-situation drama necessitate a comparative want of individuality in its characters. After all, a man seen in a single situation, even though that situation should be the critical moment of his life, is to you who know him in that situation a general type and very little more. If your knowledge of a character, whether on the stage or in real life, is to extend to the understanding of his personality you will need to see him in a great many situations and to watch the formation of his character under the continued influence of a long chain of events. By excluding all possibility of representing development on the stage, Sophocles, Aristotle and finally the classic French critics and playwrights necessarily fixed general types and universal passions or moods, as against individual personalities and complex characters, as the only legitimate object of tragic representation.

This is, no doubt, in many ways a serious loss to the drama. It is impossible to turn from the tragedy of Shakspere to the tragedy of Racine without feeling how much less is aimed at by the French than by the English poet. If it is profound insight into all the complexities and contradictions of human character, and searching criticism of the whole life of an epoch that we expect of a tragedian it will not be to the classic French stage that we shall go for our satisfaction. But, on the other hand, if once we remember what we have and what we have not a right to ask from the single-situation play, how much the Frenchman gives us that the Englishman does not. If the *Phèdre* and the *Athalie* lose in profundity by the concentration of interest on a single critical moment, how much they gain in the intensity with which that moment is presented! If Phèdre after all is not a concrete woman but the personification of two universal moods, the one mastering fury of a woman scorned and the overmastering remorse of a scorned woman who has avenged herself to the death on the too passionately loved scorners, yet where out of Racine will you find these two moods expressed with such sincerity and burning directness as in the marvellous speeches of Phèdre to her *confidante* in the first act and fourth act of Racine's play? And again, how much do we not gain both in *Phèdre* and in *Athalie,* by the rigid exclusion of every incident which is not directly involved in the production of the situation for which our interest is bespoken! It is not merely that our sense of self-respecting workmanship is not shocked as it is in the very best of the Elizabethan plays by the unequal rate at which the action of the play advances; more than this, our interest is never allowed to be diverted from the central situation of the tragedy by anticipatory episodes.

This is more than can be said of the ordinary Shaksperian tragedy. In *Hamlet,* for instance, few readers or spectators will find the duel with Laertes or any other prominent incident in the action standing out from everything else as the point of central interest; in *Macbeth* the dramatic interest might be said to be about equally divided between the murder scene, the banquet scene and the night-walking scene. And even in *Othello* it is not clear whether the death of Desdemona or that of Othello should be regarded as the emotional climax of the piece. In Racine, on the other hand, or in Sophocles, every incident preceding the central tragic situation owes its presence in the play to the fact that it points forward to something vaguely felt as brooding over the whole previous action with an undefined but sombre presage of doom to come. Hence the extraordinary tension of feeling created by the "turning point," as Aristotle calls it, of the single-situation play. When in the *Œdipus,* Jocasta, who has perceived the fatal truth more quickly than her husband-

son, hurries without a word into the palace to end a dishonoured life by her own hand, when in *Athalie,* Athalie forces her way into the temple in search of its treasures, only to find herself confronted by an accomplished revolution and a king of the stock of David, we experience a thrill of concentrated emotion such as is rarely produced by any situation in a Shaksperian play where the interest is commonly equally divided between several distinct incidents. Such a division of interest is, of course, no blemish in a play which has for its principal object the exhibition of character developing under the stress of action; in a play after the Sophoclean model, where character is to be exhibited only as it manifests itself in a single moment of intense experience, any such division of interest would create an anticlimax by which the dramatic coherency and unity of the piece would at once be dissolved. This is why technique and workmanlike skill, which are at best secondary qualities in drama of the Shaksperian type, become with Racine matters of absolutely first rate importance. Shakspere can manage with any incoherent story, arranged almost at haphazard, provided only he is at liberty to insert a few of those characteristic scenes in which he exhibits, often in no very close connection with the main thread of the narrative, his profound insight into men and human affairs; Sophocles or Racine must exhibit the most consummate mastery in the arrangement of incident and story or the interest of their central situation will be dissipated beforehand and their play will fizzle out like a damp squib. In short, we may I think say, there are two main types of tragedy; the tragedy of character and the tragedy of situation. The one is represented in ancient literature by Æschylus, and in modern by Shakspere, the other in ancient history by Sophocles, and in modern pre-eminently by Racine. As the aims of the two types are radically different, so also are their methods. Restrictions which would be the death of the Shaksperian tragedy of character are absolutely essential to the success of the single-situation tragedy, and on the other hand, a freedom from limitations of form without which the tragedy of character could hardly work, would in the tragedy of situation only lead to the dissipation of the spectators' interest. The only way fully to appreciate the beauties of each form of drama is to realize the vast difference of aim and spirit which exists between them and to abstain from judging either by considerations and canons only appropriate to the other.

This conclusion brings me back at last to a subject from which I fear I have wandered too long — the subject of *Julius Cæsar.* We may now attempt to illustrate our theory as to the spirit of French classical drama by giving a brief answer to the question, "What is there about the play of *Julius Cæsar* which might justify the epithet—'French'?"

The true answer is, I think, that *Julius Cæsar* stands out from all the other tragedies of Shakspere by its lack of internal development. There is none of that gradual growth of character, for better or for worse, which we can trace in *Hamlet,* and *Othello,* and *Macbeth,* and *Antony and Cleopatra.* What Brutus and Cassius and Antony are at the opening of the action (say in Act I., Scene II.), they remain without advance or retrogression to the end of the play. We know as soon as we have listened to the conversation of Brutus and Cassius on the subject of Cæsar's infirmities, almost as well as we do after the curtain has fallen on the stricken field of Philippi that Brutus is a weak, well-meaning and excessively vain man, "deep versed in books but shallow in himself," who will be led by one who knows how to play on his love of fine phrases and his sense of his own importance, into the most dastardly and, as he himself admits, the most inexcusable treason to his best friend, before the fine moral apophthegms have died from his lips; that he will incessantly be giving bad and unpractical advice and insisting with the characteristic obstinacy of a weak man upon its being followed to the exclusion of wise counsel; that Cassius is, on the other hand, a man of courage, insight and decision, but, at the same time, so mastered by the smallest personal jealousy of those who are greater than himself, as to be ready to set the whole Roman world at war in order to justify his spite, and we have even had a glimpse of the richly-gifted, accomplished but thoroughly unprincipled character of Antony. It is thus not in the growth or modification of character under the stress of singularly difficult circumstances and delicate responsibilities, so much as in the splendid dramatic exhibition of certain aspects of character at a moment of crisis that the interest of the play lies.

This, I imagine, must have been felt by all who were present at the excellent revival of *Julius Cæsar* by Mr. Beerbohm Tree. The dramatic interest seemed to concentrate itself almost exclusively in two scenes, the scene of Antony's oration over Cæsar's body, and the scene of the quarrel between Brutus and Cassius. What preceded the first of these scenes as well as what came between them and after the second, was felt, by at least one member of Mr. Tree's audience, as a necessary but somewhat tedious preliminary to the really interesting part of the play. In this respect *Julius Cæsar* certainly seems to approximate rather to the single-situation play of Greece and France than to the type of tragedy which Shakspere created or recreated when he went on to write *Hamlet.* And further, judged as a play that depends for its interest upon situation rather than upon evolution of character, has to be judged, *Julius Cæsar* seems singularly wanting in dramatic coherence and unity. There are in fact in the five acts of Shakspere's play the materials of two single-

situation plays of the French type rather inartistically thrown together. The climax of the first is, of course, Antony's great oration, and the central figure may fairly be said to be neither Brutus nor Cassius, but Antony. Of the second action, Brutus, who, till the end of Act III., has been subordinate in importance to both Cassius and Antony, is as unmistakably the hero as Antony is of the first. And further, though the chief features of Brutus' character are identical in both divisions of the play, there is a puzzling contradiction between the estimate formed of him in Act I. by Cassius, an estimate fully borne out by everything Brutus says or does from first to last, and the unstinted panegyric of Antony upon him at the end of Act V. So clearly marked a separation of one play into two parts each with its own hero and its own centre of interest, and so curious a discrepancy of tone between them, is, I think, unknown in any other Shaksperian tragedy, and possibly points to the conclusion that *Julius Cæsar* was hurriedly dramatized from Plutarch to meet immediate stage necessities, before Shakspere had had time to form any coherent estimate of the characters of the history. The same conclusion might not unreasonably be drawn from the curiously irritating manner in which the character of Cæsar himself is set before us. That Shakspere was not insensible to the superhuman greatness of the "mightiest Julius," we should know from more than one noble passage in later plays, even apart from the awe which in our present play the very memory of him dead produces in his assassins as well as in his self-styled avengers. But Cæsar, as he walks in the flesh through the first two acts, can hardly be described as being even "the ruins of the noblest man that ever lived in the tide of times." Not the petty depreciation of Cassius, but his own words and acts proclaim him a mere shrunken dotard, childishly boastful of exploits which he is no longer capable of performing. So extraordinary a contrast between the conduct of the living man and the fear and dread with which his deeds have inspired friend and foe alike is not to be explained by the easy reflections of the commentators that Shakspere wished to exhibit the contradiction between mighty genius and contemptible bodily presence. "From Marlborough's eyes the tears of dotage flow"— and so, no doubt, they might have done from Cæsar's had Cæsar lived into a second childhood, but on the morrow of the great fourfold triumph was no fit occasion for representing the victor of Pharsalia and Mundi as having fallen into bodily and mental decrepitude. Hypotheses of this kind are worse than useless when they are made the cloak for a discreditable idolatry which is determined to see nothing but wisdom and profound design about the veriest blunders if only they are to be met within the covers of its sacred books. For, intentional or not, it was a blunder on Shakspere's part to ask his

audience to believe that the Cæsar who could make Imperial Rome humble and tame to his bidding was, at the age of less than sixty, a superstitious and vainglorious driveller, just as it was a blunder to set Brutus to play the part of sentimental dupe of a scoundrel and then to bespeak our veneration for him as "the noblest Roman of them all," and a model of every conceivable virtue. And for my own part, I confess I think it less dishonouring to Shakspere to ascribe the blunder to haste and carelessness than to deliberate want of judgment.

Julius Cæsar, it must be remembered, is earlier in date than any of that great series of character tragedies which opens with Hamlet, and closes, so far as we can judge, with the other two Roman plays. Nowhere within that series, and least of all in the two wonderful Roman history plays in which Shakspere's tragic art is seen in its ripest maturity, do we come upon a work which can be, like *Julius Cæsar*, charged with lack of unity of dramatic aim or consistency of view. Hence, I should judge that *Julius Cæsar* must be regarded as an experiment of that situation-drama which was brought to its highest perfection by Racine. The experiment, if our strictures on the construction of the play are not entirely unfounded, was not a happy one and was never repeated. For the successful composition of tragedy of the single-situation type demands a strict limitation and concentration of the dramatist's attention on one single aspect of career, as well as a degree of technical skill, self- mastery and management of details of which Shakspere seems to have been constitutionally incapable. At the same time tragedy of this kind affords us scope for those higher gifts of sympathetic insight into the complexities of human character and deep philosophic reflection upon life with which Shakspere was dowered, perhaps, more richly than other son of our common mother Earth. It is hardly to be wondered at that Shakspere speedily found his way to the creation of a type of tragedy in which the evolution of a character rather than the display of passions in action is the object aimed at by the artist. Here all his peculiar genius has full and unrestricted room for the display of its powers, and if one is constrained to admit with certain censorious critics that even here and even at his best Shakspere is not like Racine or Sophocles a perfect and finished artist, we must also not forget that perfection is more readily achieved in the lower and narrower than in the wider and higher field.

If *Julius Cæsar* may thus be said, in virtue of its construction, to approximate to the French type of tragedy it is also unique among the plays of Shakspere in the amount of first rate rhetoric which it contains, and this is another point of analogy with the classic French tragedy of situation. It is natural that when the representation of a single intense

mood or passion is more considered than the exhibition of character or the criticism of life, tragedy should tend to be rhetorical in proportion as it is true to its ideals. And thus we find that Racine is always most magnificently declamatory where he approaches the critical situation of his drama. This tendency to rhetoric and declamation can hardly be called artificial; the eloquence of Phèdre, for instance, is part of the sincerity and intensity of her love and her jealousy. Perhaps, for the same reason, *Julius Cæsar*, which as an acted play fails to impress except in some two scenes, is fuller of striking rhetorical passages which have passed into the current speech of the English world than almost any of the Shaksperian plays. I do not, of course, forget *Hamlet* — but it must be observed that whereas the quotations from *Hamlet* are mostly taken from the soliloquies which are, as far as the movement of the play is concerned, splendidly superfluous, the quotations from *Julius Cæsar* are for the most part from passages absolutely indispensable to the progress of the play. The rhetoric of *Hamlet* is, so to say, largely an external and additional adornment of the play, that of *Julius Cæsar* is woven into the very texture of every speech and every dialogue from first to last.. In the magnificent oration of Antony, where you have — as was well brought out in Mr. Tree's acting of the part — a consummate master of rhetoric deliberately employing all its devices for an end that is more than half insincere — we have, perhaps, the only passage in Shaksperian tragedy that offers any analogy with those set tirades in which Euripides, and to a less degree Racine, indulge to the utmost the Southerner's delight in eloquent language for its own sake.

It ought, however, to be carefully observed that the language of *Julius Cæsar* is for the most part more rhetorical than truly poetical — an unusual thing with Shakspere. Somewhat obvious thoughts are clothed in language of special freshness or point, or arranged in an order likely to be effective with the audience, but of that mysterious and altogether indefinable power of suggesting by the mere sound of a verse imaginative moods too subtle for any more palpable embodiment in speech which is the peculiar sign and seal of the greatest poets there seems to be less in Julius than in most of the plays of Shakspere's maturity. There is always a certain element of the subjective and the arbitrary about the attempt to indicate passages of the kind I have referred to, and I should not be surprised if some readers were to disagree with my personal verdict, but for myself I scarcely detect the unmistakable presence of this high imaginative quality about any lines of the play except that I have already quoted about "the ruins of the noblest man that ever lived in the tide of times"—and even this, fine as it is, is commonplace beside the "thoughts beyond the reaches of our sons" of

Hamlet, the "Put out the light, and then put out the light" of *Othello*, or the "humming water must o'erwhelm thy course" of *Pericles*. It almost seems as if, in finding his true dramatic method and material, Shakspere underwent a general mental development which lifted him as a poet far above the level at which even he had stood before the composition of *Hamlet*. The special interest of *Julius Cæsar* for us is that it stands just on the threshold of that development by which Shakspere passed from being the first of English dramatists to being the first of all the dramatists of the world.

A. E. TAYLOR.

WEIMAR IN AUTUMN.

The Sun-god sets in fiery film,
  And, heedless of the gathering shades,
Illumines all the banks of Ilm,
  And lingers o'er her classic glades.

I linger with his lingering rays
  And marvel at their dying sheen,
Till darkness shrouds the leafy ways,
  And veils the still, autumnal scene.

Not here alone the sun has set,
  Not here alone is gathering gloom;
The voices we can ne'er forget,
  Are hushed to silence in the tomb.

Another sun shall rouse these skies
  To life and light; on yonder plain
Another day-spring shall arise,
  But they shall never wake again.

And yet I scarce can deem them dead,
  Whose accents o'er the ages ring
With all the magic power that led
  The hearts of those who heard them sing.

To those who breathe the air they breathed,
Who walked the paths they walked among—
Yea, though they know not—is bequeathed
Some dower of their diviner song.

The eyes that see what Goethe saw—
The poet-priest of earthly art—
May thence not vainly hope to draw
Some power to charm the human heart.

Yet intellect with death must cope,
And art with mortal man must die;
He only has eternal hope
Whose gaze is fixed beyond the sky.

O let me then in fancy rove
The paths which once a Schiller trod!
There breathes a purer air above,
And there beneath is holy sod.

RUSSELL ELLIOT MACNAGHTEN.

ARE PHYSICAL THINGS MERELY MODES OF OUR CONSCIOUSNESS?

To assert that we are unavoidably obliged to hold opinions which are yet totally inconsistent with the necessary assumptions of science, reflects no credit on human reason; nor is it conducive to the advancement of Philosophy. Whoever believes that the last result of epistemological analysis is to land us in such an intellectual *impasse,* has no ground for blaming others for underrating the value of Philosophy, since on his own showing, it has ceased to have any *raison d'être* and can at best possess interest only for the history of human opinion and development.

There is a doctrine at the present time which still shows a surprising vitality, and experiences a hospitable reception especially amongst some physiologists and biologists who display an interest in problems of the theory of knowledge. It maintains that "the last result of scientific analysis is Solipsism, that is, the assertion that the only real existence is the thinker's own soul." "The external world," we are so informed by its advocates, "and all its objects, even the appearance of our fellow-men are mere sensations of our own soul." Yet, it is admitted: "This position, however logical, no one can practically accept. Everyone, the scientist included, believes that his fellow-men are as real as himself; but in so doing the scientist must admit that the phenomena exhibited by some animals — the human race at least — are not fully explicable from the data of force and matter, and this is the whole point at issue." [1]

[1] *McGill Magazine,* Vol. III, No. 1, p. 145, "Huxley and Agnosticism," by Professor MacBride. The reference in this article is to Verworn's *Allgemeine Physiologie.*

There is, I venture to think, a confusion involved in this last statement regarding the whole point at issue. For to admit, "the phenomena exhibited by some animals are not explicable from the data of force and matter," by no means requires an acceptance of Solipsism. Materialism and Solipsism do not exhaust the variety of possible philosophical theories, so that a denial of the latter is equivalent to an assertion of the former, or *vice versa*. There are many Idealists who quite rightly reject Solipsism, and again there are thinkers who refuse to regard any form of either Materialism or Idealism as satisfactory. But, not being concerned with a classification of philosophical theories, we turn to discuss the correctness of the important statement that the "last result of scientific analysis is Solipsism," for this view admittedly involves a *reductio ad absurdum* of knowledge in general. Such a position recalls Byron's lines on a certain theory of Materialism:

> "When Bishop Berkeley said 'there was no matter'
> And proved it—'t was no matter what he said:,
> They say his system 't is in vain to batter,
> Too subtle for the airiest human head;
> And yet who can believe it?"

Who, indeed? An irrefutable system ought surely to be credible. An incredible system ought to be refutable. Otherwise we should be reduced to the ridiculous situation of having to maintain that although the correctness of the theory is beyond doubt we cannot accept it because of its absurd consequences. Now, one of the best methods of testing the correctness of a scientific theory consists in comparing the consequences logically deducible from it with already established theories, laws of nature or observable facts. A hypothesis which conflicts with these is rightly judged to be invalid. Assuming the possibility of knowledge as every scientific investigator is not only entitled, but rationally bound to do and implicitly does, it follows that a theory which leads to an interpretation of existence radically incompatible with the principles, general standpoint and facts of science is false. Solipsism stands in obvious contradiction to the general principle of modern biology. The biologist, if he be scientific, assumes, if he does not openly assert, that both inorganic and organic matter existed on the planet before there was any consciousness, *i.e.*, physical things and changes preceded and existed independently of individual minds or "souls." This is a necessary implication not only of the nebular hypothesis, but also of the

received doctrine of the gradual evolution of organic forms through the action of natural causes. Were such an Idealism true, the events described by geology could not be regarded as historical facts. Solipsism is unable to supply any basis for science. Indeed, it undermines its basis. Inasmuch, therefore, as it is an utterly impossible working hypothesis, it may be argued *a priori* that it cannot be true. Its premises, I shall attempt to shew briefly, are in some instances dogmatically assumed rather than proved; while its seeming plausibility depends on defective analysis and fallacious reasoning.

Solipsism, or, as it may be otherwise termed, Subjective Idealism, involves the revival, either consciously or unconsciously, of the Berkeleian doctrine which found its technical expression in the formula *esse* is *percipi*: existence consists in the perception or the possibility of perception. "Sensible things," argued Berkeley, "are those things only which are immediately perceived by sense," and "those things which are immediately perceivable are ideas, and these exist only in the mind." "The brain being a sensible thing . . . . exists only in the mind." "All material things are insensible."[1] The logical consequence of this standpoint seems to be that my perceptions, or, as they are confusedly called, ideas, are alone real.

Instead of concluding, however, that "I with the idea of the world in my head am the only sole reality known or knowable," Berkeley believes in the equal reality of other finite minds, though these ought to be, according to his own principles, only ideas in his own mind. Moreover, he has recourse to an independent agency as the source of the series of individual experiences, by which he apparently escapes some of the difficulties naturally resulting from the doctrine *esse* = *percipi*. This background of existence consists of an Universal Mind. Now, it appears to us as if any other external agency would have served the purpose equally well. Owing, however, to the theological cast of his intellect and to the belief that only "that which is capable of having ideas can exist," Berkeley straighway identifies this universal agency with God, the existence of whom appeared to the philosopher from the very start, as certain as his own. With tiresome repetition he insists on the *dicta* "an idea can be like nothing but an idea," and "no idea can exist without the mind," or, "an idea can exist only in the mind" and supposes that such bare tautologies suffice to prove that they can be produced only

[1] *Dialogues between Hylas and Philonous*, Fraser's edition, Vol. II, pp. 298, 301. Did Berkeley ever perceive his own brain? If not, did it exist? I shall not delay to consider the ambiguities involved in Berkeley's use of the terms "sensible" and "insensible."

by an active "spirit."[1] The assumption is that an idea can know only itself, or at least that it cannot afford us a knowledge of something else than ideas and "spirits." But, unless you encumber yourself with some arbitrary definitions and fall back upon an exploded scholastic conception of causation, which requires qualitative similarity between cause and effect, there really appears to be no difficulty in supposing that an idea, much more, then, its original sensation, may be occasioned by something that is not spiritual, and of which it may give us some knowledge. Moreover, Berkeley never offers a satisfactory explanation of what he understands by "spirit." While rejecting, through a misunderstanding, the possibility of abstract ideas (or concepts) such as those of triangle, man and matter, he maintains that we can frame a "notion" of spirit. This notion remains vague, and useless, because essentially negative, consisting as it does merely of a combination of the opposition of those qualities which physicists ascribe to matter. As little as the material substratum against which Berkeley's polemic is so constantly directed is it ever realized in actual experience.

Connected with the above mentioned proposition of Berkeley's Idealism, there is obviously a second, which must be regarded as the necessary complement of the first, if not the basis of the whole doctrine. Formulated in the same terms, it asserts *percipere* = *esse* or *esse* = *percipere*: only what is capable of perception or thought exists. Hence reality is ultimately spiritual, and non-thinking beings do not because they cannot exist. These statements are never proved by Berkeley; and they are probably not capable of proof. The assertion that "only what is capable of having ideas" can exist is assuredly not axiomatic, for other-

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[1] The important point to be decided is: "Does the existence of the physical universe or all knowledge of existence resolve itself into ideas?" The *esse* of ideas, argued Berkeley, is *percipi*. All objects of human knowledge are nothing but ideas. Hence their *esse* is *percipi*. Or, again, his position may be summed up as follows:

What we call material things are perceived and can exist only through and in our ideas.

Now, it is evident that no idea can exist apart from mind.

Ergo, whatever exists, exists only through and in perceiving mind. Unfortunately, perception (sensation) and conception (thought) are never clearly distinguished by Berkeley. His doctrine owes a certain plausibility it has acquired to confusion between these different psychical functions, with which is connected the view that the "immediate object of knowledge" consists of ideas or complex of ideas. But will any one but a devotee of Christian Science maintain that the pain of an actual toothache exists only as an idea; or that the tooth itself has merely "ideal" existence? If, however, with Berkeley you put "external things" = "sensible things," and these again = "sensible qualities" = "ideas" = "the only objects of experience," it follows without difficulty that "the very being of a tree or any other sensible thing implies a mind wherein it is." But it would be desirable to establish the premises, if you wish the conclusion to possess more than hypothetical validity. In all discussions with Idealism, it is important to get back from the "world of ideas" to the more "vulgar" sphere of sensation and volition; but over the former, Platonising Idealists usually hurry as rapidly as possible, scarcely attributing to it any cognitive function at all.

wise a rational dispute concerning its validity would be out of the question. It is no deduction from fundamental principles of Logic. It is no postulate of experience. It is not, so far as I can see, a law of Nature. It is finally not even a generalization from experience. "That, the existence of which consists in being perceived, can not exist without being perceived," insists Berkeley. The correctness of the statement is obvious; its denial would involve a contradiction of thought. To suppose it proves that "only that which is perceived can exist" is to deceive oneself by a palpable fallacy.[1] For in order to establish this assertion a further proposition would require to be proved, namely, "that there is no other mode of existence than perception or thought." On closer analysis, Berkeley's whole position discloses itself as founded on an obvious *petitio principii.* No axiom or principle of thought, I insist, stands in the way of one seeing an "unthinking" substance, such as a piece of iron. Nor does this metal itself become perceiving or thinking in the act of being perceived. Neither psychological nor epistemological analysis leads to the conclusion, as I shall point out, that the *esse* of things is merely *percipi* and nothing more.

We ourselves, the finite "spirits" become at times "unthinking." But, if *esse* be *percipere,* and there be no other mode of existence, what becomes of the human consciousness during such intervals of unconsciousness, as, for instance, during dreamless sleep? Well, if once the existence of the external spiritual agent has been assumed, it is easy for Berkeley, though not for the consistent solipsist, to say that they exist in or are sustained by God. It may, perhaps, be difficult to explain what this existence or "sustentation" means. Yet this is for Berkeley after all a question of minor importance, which, if inconvenient, can along with a good many others, be shelved by exercising the philosopher's privilege of resorting to the *asylum ignorantiae.* But now, if notwithstanding such "unperceiving periods" my, or your existence be not denied, why should the existence of physical things be denied because they are unperceiving? Another question may be asked, which brings

[1] It appears that Berkeley deluded himself thus, for he argued that if there were any "matter" existing "outside" the mind, this would mean that something existed without existing. *Quod absurdum est!* Certainly! by definition! Thus when one of the interlocutors in the *Dialogues between Hylas and Philonous* asks: "What more easy than to conceive a tree or a house existing by itself, independent of and unperceived by any mind whatever?"; the retort is: "Is it not as great a contradiction to talk of conceiving a thing which is unconceived?" And when the same interlocutor again remarks: "I grant the existence of a sensible thing consists in being perceivable, but not in actually being perceived," there comes the old reply: "And what is perceivable but an idea And can an idea exist without being perceived?" Thus, from a mixture of unfounded assertions and dull truisms, we ascend to a weighty philosophical doctrine involving the non-existence of the Universe apart from some sustaining mind.

out the ambiguities and obscurities of these "Principles of Human Knowledge." Supposing that a hundred persons have an idea of the moon simultaneously; do they all have the same idea or has each of them a different idea? In the latter case, instead of one moon, there must be a hundred different moons, a supposition which would render any agreement between the experiences of the various percipients difficult to conceive. In the former case, would not the identical idea, existing somewhere and somehow even when not perceived by a finite mind, be related to the different percipients much in the same way as an external corporeal body? One of the Interlocutors in the *Dialogues between Hylas and Philonous* raises the difficulties involved in this question as also in the problem regarding the size of the real moon; without their being satisfactorily resolved by the philosopher.

It is interesting to remark and desirable to emphasize in this connection that even Berkeley who is regarded, and rightly so, as the classical English representative of psychological Idealism, does not accept the solipsistic position. Nor, indeed, could he, without undermining the foundation of his Spiritualism; for God, the common and indispensable basis of experience, exists whether I or any other finite mind perceives or am aware that he exists. His *esse* is not *percipi,* but *percipere,* whatever that may ultimately mean!

In certain main characteristics, Schopenhauer's Theory of Knowledge bears a resemblance to Berkeley's. For Schopenhauer also, the only objects of knowledge are ideas. "The world is my idea." Such is the text to the first part of his chief philosophical work, *The World as Will and Idea.* Schopenhauer is concerned to show that an external world (or the idea of an external world) exists only as a product of the individual's consciousness, which projects its ideas outside itself and locates their causes in space and time. But the attempt moves in a circle and its alleged result stands in glaring conflict with the same philosopher's fundamental metaphysical doctrine, which maintains that the ultimate reality consists of a blind unconscious Will. This Will, according to Schopenhauer, underlies all particular phenomena, exists independently of and prior to the individual thinker with his categories of space, time and causability and particular circle of ideas.

A careful perusal of his works, and especially of the additions belonging to the second and more illusionless period of his philosophy, leaves no doubt, I think, that the existence of physical things (even matter), is tacitly assumed by Schopenhauer, who, unfortunately, confuses the *reconstruction* of experience with the *construction* of existence by and out of the individual's consciousness. Schopenhauer is obliged

to admit that sensations,— despicable and miserable as sensation is,— afford us the " stuff " of knowledge. This " stuff " we do not ourselves produce, but receive or have to acquire. Now, the brain's function of thinking according to the principle of cause and effect proceeds from the existence of the sensations to infer the existence of causes beyond or outside of the percipient and finally, after various complicated experiences, gives rise to the idea of an external universe in space and time. But if the external causes had not pre-existed, how could they have produced those effects from which Schopenhauer tells us we proceed to the construction of an external universe? What sense is it to talk of the action of something which *ex hypothesi* does not exist — until its effect is given, when *mirabile dictu* an argument from the effect produces in turn the cause. The world, we are told, is a mere brain-phenomenon. Granted! what and where is the brain? A mere idea in space (!) and time, although according to Schopenhauer, possessed of the attribute of weight. The brain is originally the basis of a certain apparatus of thought; afterwards it exists only as an idea of its own function. The strange mixture of Materialism and Idealism running through this thinker's Theory of Knowledge and Metaphysics may be passed over without further comment. We would merely inquire whose then is the ultimate brain on which the universe of ideas depends? [1] Is it, as it seems to be, the philosopher's? What then and where were Schopenhauer's parents before what was called Schopenhauer arose? Must not the received theory of generation be revised, for anyone who holds that the existence of sensible things is dependent on his existence? Does it not, however, sound a little strange, if, indeed, not rather presumptuous, for a man to assert that his parents exist only as his ideas? Yet this is the logical result of Solipsism with its *dictum*, that reality and individual experience (states of individual consciousness) coincide. The self-assurance of this kind of Philosophy is well illustrated by an utterance of Goethe's Baccalaureus in the second part of *Faust*:

" Die Welt, sie war nicht, eh ' ich sie erschuf;
Die Sonne führt ich aus dem Meer herauf;
Mit mir begann der Mond des Wechsels Lauf."

Whenever the solipsist retires to rest and passes six or eight hours in dreamless slumber, the existence of what we call the universe has for

[1] Or, is it not a consequence of this Idealism that the ultimate subject of experience is brainless?

this period been interrupted, even if some other solipsist (supposing another exists) has remained awake. Each solipsist exists for the other only as an idea or complex of ideas.[1] Each can, therefore, from time to time, destroy the existence of the other. There is thus no common basis of existence, and hence logically no continuity of experience. Of such a standpoint it may be said *instabilis tellus innabilis unda.*[2]

But, admitted that these and other curious and seemingly ridiculous consequences result from the adoption of the solipsistic attitude, still you have not shewn, it will be said, that the starting point of Solipsism is false, or that its psychological analysis is inaccurate. It will, moreover, be urged that it finds support in a so-called physiological Idealism, a theory that is conceived as following inevitably from a doctrine first clearly enunciated by Johannes Müller. So great is the respect in which this doctrine of Müller's is held, that to call it in question or even criticize it is sufficient to provoke in some quarters a feeling akin to that with which older thinkers on the question of Biblical Inspiration view the attitude of the Higher Critics. It is revered as if it had been disclosed in a special revelation, or as if "vom Himmel gefallen." Even Helmholtz has declared its importance in the physiology of sensation to be equal to that of the law of gravitation in astronomy. "This truth is one of the profoundest of any that the human mind has ever attained," exclaims Bunge, whose Neo-vitalism appears to me to have nothing but the name in common with older vitalistic speculations, but stands merely for a protest against a now obsolete Materialism. Yet Helmholtz in his attempt to defend the whole theory from objections has developed it in a direction that really tends to undermine the basis of the original

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[1] "Wenn das Gehirn meines Nebenmenschen nur eine Vorstellung in meinem Geiste sein soll, wie ist es denn moglich, dass meine Vorstellung unter Umständen im fremden Kopfe erkrankt und meinen Nebenmenschen zu allerlei Wahnausserungen zwingt," asks an acute German thinker of the present time. If I have a toothache at the moment and you have a similar pain, will you maintain that my toothache is merely your idea of mine and yours is merely my idea of yours?

[2] The solipsist is also confronted with such a question (to take a specific instance) as whether the planet Neptune existed before Gall saw it from the Berlin Observatory. Or did the calculations of Leverrier and Adams first call it into being? Of course, if you have an Universal Spirit to fall back upon, about whose attributes and intentions you know as much, if not more than you do about your own mental life, it may be easy to reply that the still undiscovered planets and chemical substances exist as possibilities in (or are sustained by) this all-accommodating receptacle. But this way of escape is not open to Solipsism. Amongst other difficulties, the question presents itself, whether we can ever see the same thing twice. According to Solipsism, the perceptions and the objects perceived fall together. But the very same perceptions are never renewed. How then can we experience the same object again?

doctrine.[1] Without examining the validity of this doctrine of specific sence energies, which in its extreme Müllerian form is, I believe, quite misleading, it may be said that even if it were a tenable theory, it would still not suffice to bear up the epistemological structure which some thinkers have attempted to erect upon it. I shall content myself, therefore, with merely pointing out how and why it cannot be employed on behalf of Solipsism, as Verworn, for instance, following the lead of other thinkers, assumes.

The doctrine of specific sense-energies, or as it is more accurately termed nerve-energies, contains a general assertion of the indifference of the quality of the external stimulus for the quality of the resulting sensation. One and the same physical stimulus, it says, can produce in different organs of sense different sensations; for example, electrical stimulation may produce sensations of sight and taste; or different physical stimuli can produce in one and the same sense-organ similar sensations; for instance, sensations of light can be produced either through mechanical pressure or an electrical stimulus. "The optic nerve does not see because the retina comes into contact with what we call physical light." *If we could* interchange the optic and auditory nerves, said Müller, we could see with our ears and hear with our eyes. From these and similar alleged facts Johannes Müller and his disciples have concluded that what we experience in our sensations is not the qualities of external things, but states and qualities of our nerves.[2] But even if the facts and the interpretation of the facts put forward by the upholders of this doctrine be admitted, it does not follow either that external things do not exist independently of me, the percipient, or that the stimuli are themselves mere individual sensations. Granted that we know external things only by means of the sensations produced in us, and that we are

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[1] Adopting a terminology of Fichte's, Helmholtz distinguished between the modality and quality of a sensation, the former term indicating that peculiarity in sensation by means of which the various classes of sensations are differentiated from one another; for instance, sounds and tastes, the latter term indicating the differences between sensations of the same kind, as, for instance, different colour-sensations. Helmholtz regarded the modality as exclusively subjective, at the same time holding that the quality was dependent on the character of the external physical stimulus. Now, there is no "modality in general." This is an abstraction of thought. There is no "taste in general"; there is no "hearing in general." What we hear is always a particular voice or sound of definite character. If, therefore, the "qualities" of sensations are admittedly dependent on the nature of physical things, the "modalities" which are as it were the sums of the former must be regarded as similarly conditioned. The whole theory will have to be revised in the light of Weinmann's penetrating criticisms.

[2] Amongst the predecessors of J. Müller in the doctrine may be mentioned Spinoza, whose method is *a priori* and not convincing. "The ideas which we have of external bodies disclose the nature of our own body rather than the nature of external things." *Ethics* II, Prop. 16, Coroll. 2.

unable to say that the qualities of these things resemble the qualities of our perceptions of them, still these statements cannot be employed to disprove the proposition that the things exist also when not perceived. The independent existence of an external universe would not be annihilated or placed in doubt, even if it could be shewn that all the qualities which go to make up our picture of it are merely phenomenal. For there would still remain the ground of these phenomenal qualities. To admit that we know the external stimuli solely through or by means of our sensations, is not equivalent to the admission that they are nothing else than our sensations. Since the physical stimuli are at least conceived even by the upholders of the doctrine of specific sense-energies in this extreme aspect, as the occasions of the sensations, they must be conceived as existing previously to the latter, and do not through the mere fact of their arousing sensations or being perceived become transformed or dissolved into psychical processes. The "indifference of the stimuli" is so far from proving that things which are the grounds of these stimuli can not exist independently of my perception of them, that it actually goes to show their reality outside and independent of me, the subject. The attempt therefore which has been made more than once to find a foothold for Subjective Idealism in the doctrine of specific sense-energies depends on a palpable confusion of thought. Amongst other shortcomings, it fails to distinguish between a physiological doctrine regarding nerve stimulation and nerve change and a psychological theory of perception. In Johannes Müller's doctrine of sense-perception, Idealism, strangely enough, goes hand in hand with a materialistic Psychology. It is asserted by an adherent of the doctrine of specific nerve-energies that the question what our perceptions can and cannot teach us is a physiological one.[1] But physiological processes and perceptions are not, we must insist, identical. The physiology of our organs of sensations, we are informed, has to decide concerning the nature of the sensations, and yet only the sensations are real. Who will not see in such utterances a confusion between the physiological and psychological standpoints, and recognize that there is a tacit assumption of the independent reality of physiological processes?

When I turn away from a rose, the "red" colour and the smell disappear for me; for these can exist for me only so long as my sense-organs are affected by the thing we call a rose. Is the rose thereby

[1] Verworn, *Allgemeine Physiologie*, 2nd German edition, p. 36. On p. 37, the author says: "mit unserem Tode, mit dem Zerfall der Sinne und der Nervensystems verschwindet die Körperwelt in der bisherigen Form vollständig." To make this statement certain the words "fur uns" require to be added or understood. The qualifying clause "in der bisherigen Form" is important. A non-solipsist might quite well agree with the above sentence with this qualification.

annihilated? Certainly not. What then remains? I answer the "thing" or that which is the ground of the occasion of certain sensations of sight and smell in me.[1] Otherwise how was it intelligible that some other percipient looking in the same direction in which I had previously directed my attention is aware of similar sensations of colour and smell? It is surprising to hear the fact of "those born blind having a totally different conception of the world from others" employed as an argument on behalf of Subjectivism, since it can be readily turned against this interpretation of knowledge. For does it not afford an interesting supposition by means of a method of indifference, to a proposition long ago put forward by Locke that the individual mind can make or invent no new kind of sensation? A man born blind does not know what colour-sensations are, and just as little does a deaf man understand sensations of sound. And why? Because the nature of these sensations depends on something else than the psychical character of the individual. We cannot give sensations — the materials of knowledge — to ourselves.[2] The irresistible and involuntary character with which they come to us or are presented, shows, as Locke remarked, that their contents and varieties are determined by something independent of each one of us. Thus the blind man's conception of the Universe differs from that of other people because, owing to *physical* deficiencies, he is unable to be affected in a certain way by a reality beyond himself, from which those with normal functions of vision receive the corresponding stimuli. It is the blind man that is poorer thereby and not the character of the Universe or whatever stands for Reality.

Is the green that we see a quality of the grass itself or is it only a mode of consciousness accompanying certain cerebral changes? Does the yellow colour of the gold exist where common sense supposes it to exist, namely, in the gold? What, if any, degree of correspondence or similarity is there between the ultimate qualities of the grass and the

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[1] Even Berkeley admitted that if he left his study, the table that he had been writing on would still continue to exist and might be perceived by some other "spirit." "That the colours are really in the tulip I see," he remarks in an interesting passage, "is manifest. Neither can it be denied that this tulip may exist independently of your mind or mine . . . . ." "The question between the Materialists and me is not, whether things have a real existence out of the mind, but whether they have an absolute existence . . . . ." (Berkeley's Works, Fraser's edition, II, pp. 286, 330.) Thus Berkeley saw more clearly than some of his later disciples the real philosophical question in dispute. It was against a dogmatic Realism which was materialistic that Berkeley was contending, opposing to it an equally dogmatic Spiritualism.

[2] "The organs themselves, it is plain, do not produce them, for then the eyes of a man in the dark would produce colours and his nose smell roses in the winter." "But if I turn my eyes at noon toward the sun, I cannot avoid the ideas (*i.e.*, the sensations) which the light or sun then produces in me. *Essay on the Human Understanding*, Bk. IV, pp. 328, 329, Fraser's edition.

gold and the perceptions I have of them? These are doubtless very difficult questions with the solution of which we are not here concerned. Whatever may be the final answers given to them, this much seems already certain, that the "green" and "yellow" that I see do not exist in *my* brain, since I do not see the interior of my own head. The Solipsism which argues that the whole world exists only in our head, because we know nothing but our perceptions and all these are in the brain, wrongly identifies the place of the material conditions of the sensations with the place of the sensations, or confuses these conditions with the sensations themselves. If *esse* is merely *percipi,* the individual's brain does not exist for its owner. At best, it is only a possible object of perception for some other individual under exceptional circumstances.

It would not be difficult, I think, to show that the various senses combine to support one another in testifying to the existence of an external (and assuredly with reference to the individual mind) independent reality. It must not be supposed that in asserting this, it is suggested that the external world exists apart from our consciousness in the very same way, that is to say, with the same qualities with which it exists for our consciousness. If "the error inherited from childish days that the external world, apart from our soul, is the reality" be taken to imply the former view, it may be left to the naïve Realists to defend, but I doubt that any representative of the species will be still found among philosophers. But if on the contrary it be taken as implying a denial of the doctrine that there is nothing real but a series of personal perceptions (or experiences), and as asserting that apart from the knowledge of an external Universe we should not know our own "soul," it may, I think, be regarded as a quite defensible position. There is a crude, and certainly in philosophical circles now obsolescent Realism which precedes the examination of the problem of perception and which assumes that external things exactly resemble our pictures of them. And there is a more critical Realism which is consequent to this analysis, and which maintains that the qualities of our perceptions depend partly on the nature of external physical things and partly on our modes of perception or organs of sensation. It asserts the existence of grounds outside and independent of us for the fundamental distinctions between these qualities. For, although the qualities of our perceptions are doubtless conditioned by the nature of our organism, the constitution of the latter is in its turn conditioned, its various sense-organs having been developed through interaction between the organism and its physical

environment.[1] A careful analysis does not reveal that we (or our souls) are the authors or originators of these qualities. According to Solipsism, the "soul" indeed, has no existence, inasmuch as a perception of it is never forthcoming. If the "soul" were the only reality, it would follow then not only that I do not know reality at all, but it is as impossible for me to be as immediately conscious of my own existence as that of any other person. In postulating the existence of this "unknown something," it is interesting to notice how Subjectivism falls back upon a crude scholastic Psychology.[2] Berkeley's Idealism had to rely on a very anthropomorphic Theism.[3]

The admission of a certain dependence of the qualities of what we call matter, or the ultimate constitution of physical things, on a percipient subject cannot be taken as implying that the individual consciousness calls forth these qualities from its own unknown hypothetical immaterial basis and constructs them into a picture which it then terms the material universe. If physical things were nothing else than mere states of individual mind, it would be unintelligible how there should be the appearance of anything material at all. But, seeing that the qualities of matter, for instance, extension and impenetrability, are not deducible from the apprehending subject or explicable by reference to any system of immaterial agency, the more reasonable view is to regard them as

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[1] The doctrine of specific sense-energies, in its extremely subjective form, makes everything depend on the internal bodily connections. It dissolves the character of physical things into states and qualities of the sensory nerves. A fundamental defect of this view is that it overlooks the fact that our sensory apparatus itself belongs partly to the objective world and has gradually been developed in and through contact with an external reality. It is hardly to the point for the biological solipsist to urge that the primary result of this evolution of the sense-organs is not to afford us knowledge of the character of this reality, but merely to effect the conservation of the species. For, so long as the mere existence of this reality is admitted, there is an end to Solipsism. And apart from this, it does not follow that a biological development must necessarily be inimical to knowledge. For why should our intellectual capacities be the feebler because they have been gradually evolved?

[2] Verworn rightly speaks of the difficulty of criticising the conception of vital force owing to the vague, intangible character of the definitions proposed by non-vitalists. Probably most people will experience a similar difficulty with regard to his own concept of a "Psyche," a clear definition of which is not, so far as I can see forthcoming. That it seems to be something else than, and something standing behind the "Vorstellungen" and "Empfindungen" which are mixed up in an indescribable confusion, appears to follow from numerous expressions, such as, "Vorstellungen im unserer Psyche," "Empfindungen von unserer Psyche," etc., etc. Perhaps the "Psyche" is a sort of "Wirthshaus" for the sensations and ideas!

[3] Very well does Hylas remark in Berkeley's *Dialogues*: "It seems to me, according to your way of thinking and in consequence of your own principles, it should follow that you are only a system of floating ideas without any substance to support them." But Berkeley believes he escapes this conclusion by falling back upon Descartes' fallacy of inferring from the existence of individual perceptions and ideas the existence of a thinking substance as their ground for support. Neither Descartes nor Berkeley, I venture to assert, knew himself as "spiritual substances"; but merely as existences capable of thought.

founded in the nature of the reality underlying both physical things and physical processes. This "care of existence" may be, as I consider Kant has shewn, neither matter itself nor thinking being. We do not *make matter,* but only a *concept* of matter. Hence, granted that "the sensible qualities of matter exist *only* for minds which have certain experiences in the way of sensations,"— a proposition difficult indeed to establish — and admitting further that "the nature of matter as known is constituted by its being known, or at least knowable," these statements are insufficient to prove the hypothesis of the non-existence of an external universe apart from perceiving mind. Nor would they render in the least plausible the supposition that this reality would be bereft of all qualities without the intervention of a consciousness. For, to admit that we *know* this reality only *through* our perceptions is very different from asserting that it *exists* only *in* our perceptions. But it may be supposed that no one has ever been guilty of the gross blunder of arguing that because it is impossible to eliminate the act of apprehension or perception from the condition of knowing a phenomenon, that therefore the perception sustains in existence the phenomenon perceived. Nevertheless, thinkers have not been wanting who have implied in their doctrines that what exists *for* our knowledge, exists only *by* our knowledge of it. Indeed, this is the obvious and fundamental fallacy underlying Solipsism or Subjective Idealism. Because perception is an indispensable condition of knowledge it is fallaciously erected into the sole mode of existence of everything.

For the refutation of Solipsism, it is superfluous to discuss the question "why it should not be an arch-conjurer who disturbs us with this vain show of a physical order." Even if there were any evidence for the hypothesis of an "almighty Puck" who "built us all as a gigantic joke to see how much he could take us all in," so that to use a simile of Mr. Hobhouse's, "our perceptions might bear no more relation to a perceived object than a feeling of nausea to the movement of a ship," the solipsist would still be dependent on this real agency who created him "by way of a joke." And hence, instead of all things depending on his consciousness, the solipsist would turn out to be merely an imperfect product. With such a demon-hypothesis, Descartes played in the *Meditations,* thus shewing the influence of a mediæval theology.

There is a question often propounded by solipsists, with which they hope to perplex their opponents, and by which they confuse themselves. "How is it possible," they ask, "to get outside the circle of our own sensations and ideas?" The alleged difficulty depends upon an implied assumption regarding the nature of sensation and on a misleading formu-

lation of the problem. In this respect, it reminds us of the gratuitous problem with which, according to report, Charles II. perplexed for a time some of the members of the Royal Society. Had the "natural" philosophers of whom it was inquired how it happened that a live fish placed in a bowl of water already full did not cause the water to overflow, or increase the weight of the bowl, only attempted in the first place to verify the alleged statement of fact, they would have spared themselves the trouble of devising hypotheses to explain a fictitious difficulty.[1] So here it must be inquired, "are we ever enclosed within the circle of our sensations?" Or to state the question more significantly: "Do we require to get beyond the sphere of our perceptions?" The answer, it seems to me, is not doubtful. In the very having of sensations we are already beyond "ourselves"; we are immediately made aware of something else than merely individual psychical processes. Recognizing in all sensations the existence of a common element, consciousness, we have to recognize simultaneously that the contents of our sensations differ considerably from one another. These differences point to the existence of a common and in regard to each of us independent reality. It is a mistaken assumption of Solipsism to suppose that sensations are exclusively subjective in the sense that they bring us into contact with nothing but ourselves, and are explicable solely by references to processes "under the skin." Neither the degree of intensity, nor the particular quality of a sensation can be understood by reference to the sentient subject alone. Even Helmholtz who was unduly influenced by Johannes Müller's and Schopenhauer's theory of perception, says: "Blue is only (!) a mode of sensation; but the fact of our seeing blue at a certain time in a certain direction must depend on some 'real' cause. If, at another time, we see in the same place 'red,' this 'real' cause must have undergone a change."

The external reality, which limits and surpasses in its operations any results of our activity, is as real as our sensations, with the existence of which we are simultaneously aware of it. The view launched upon modern philosophy by Descartes, and so frequently endorsed since his time by many Idealists, according to which we have to begin with a knowledge of our own subjective states whence we reach after a series of reflections and reasonings the existence of something transubjective that remains often problematical or, at best, only mediately known,

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[1] For an amusing and instructive reference, see *Notes and Queries*, Vol. IX, Series 7, pp. 168 and 331. Even if the story originated with the Florentine Academicians and can be attributed also to Louis XIII of France, it is not the less interesting as illustrating a search for the reason of something that had not been ascertained to be an actuality.

depends on a misleading abstraction. It involves the unfounded hypothesis that the starting point of experience is some single act or isolated process of the individual consciousness, or, perhaps, an "isolated soul" known exclusively to its specially endowed possessor through an isolated act. But such interpretation really reverses the actual order of the development of experience, which contains at the outset in an undifferentiated whole of immediate experience — as the observations on primitive people and children go to show — what afterwards comes to be regarded as split up into subjective and objective elements.[1] Indeed, any meaning the designation "subjective" comes to possess, it acquires only as part of the larger complex notion of the inner life as distinct from the space-extended "not-self"; and it is only when "this distinction is apprehended dimly or clearly that there comes to be possible any significance at all in the designation "subjective."[2] The question which presents itself, therefore, to a Theory of Knowledge is not, "whether we can prove the existence of an external world from our perceptions"; but rather the question, "Does scientific analysis go to disprove the existence of some reality independent of me?" The former question appears to me to be devoid of significance.[3] The latter is answered by both psychophysical and epistemological analysis negatively.

Let us consider a couple of instances which go to support the view for which we have been contending. If two individuals, either simultaneously or at different times, journeying by a certain line of railway from Montreal to Ottawa, experience a series of similar perceptions in a definite order; and if, in returning to Montreal, they receive these impressions similarly to one another, though in an exactly reversed order, as we know they can; then the interpretation best compatible with these facts is that there exists an independent reality which is the ground of this fixed order of, and of the consilience between, these individual experiences. Again, a fire which is perceived by no one spreads and lays a building in ashes. An effect is found, the cause of which has not been actually observed. Did a cause of this change really exist? Or was there no cause? Yes, it existed, those will reply who hug a preconceived theory, regardless of the consequences to which it leads, "but it existed as a possible perception or a possible experience from a consciousness." Can it, however, be supposed that a merely possible, non-actual "anything" can have caused such real changes within the sphere of

[1] The "objective" is both psychical and physical.

[2] Adamson, *Modern Philosophy*, vol. II, pp. 63, 64.

[3] It must, of course, not be confounded with the question "how we come to have a knowledge of an external world," or with the question, "what meaning is to be ultimately attached to this externality."

actual experience?[1] If to attempt to explain events by events which have never been perceived, and hence, according to the hypothesis, have never existed, is not sufficient to expose the futility of the theory, it becomes doubtful whether any scientific hypothesis ever propounded is too ridiculous to be received!

The example just quoted (and many similar ones could be added) goes to prove, I think, that the possibility of being perceived does not comprise the whole content of or exhaust all that we understand by physical things. Besides becoming objects of our experience, these things are able to act on other things, and even if we are unable to understand the mode of their operation, we are forced to recognize its occurrence by the fact of changes which take place independently of your perception of them or of mine. Now, if the existence of any fact or event can be conceived independently of your consciousness (or of mine), and the above mentioned example shews, I believe, that this is possible, then there is no reason to suppose that it requires for its existence any other consciousness, either individual or universal. If the brain-change corresponding to a given perception exists independently of my perception of it (as it usually does), then there is no reason to suppose that all the physical world and its events can not exist likewise independently of my perception.[2] It is beside the point to urge against this deduction, that when we imagine such events "as existing unperceived, we always imagine ourselves present perceiving them, and cannot completely imagine ourselves away without their vanishing." Doubtless as objects of knowledge, such events must be present to a percipient; "presence in or to consciousness" being involved in the very meaning of knowledge. But the very question is, whether such events or processes

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[1] Professor Strong, in his strikingly entitled book, "*Why the Mind has a Body*," thinks, however, that such arguments need not cause any embarrassment to the "quick-witted Idealist." After admitting consistently that "when I leave the room, the tables, and chairs, the pictures, etc., all cease to exist, the walls having then outsides but no insides," he argues that when we re-perceive objects after an interval and find them changed, this may be explained by supposing that "when objects are re-created for perception (ought it not to be also *by* perception?) they are simply re-created changed; which is as easy for them as to be re-created the same," p. 188. Certainly, if you admit the possibility of a continual alteration of annihilation and creation, you ought to accept any miracle at all. And obviously a miracle on a larger scale involves no greater logical difficulty than a smaller one. But who, *i.e.*, which idealist ultimately performs these creative acts? If each performs them on his own account, how comes it that the results agree?

[2] Whoever asserts the existence of other human beings, though he may maintain Solipsism in words, has unconsciously surrendered the position. For, if you admit, that something, in this case other minds, exist whether you continue to be aware of them or not, you have admitted that you know something which is not a mere fact or content of your experience. And if you admit that other "minds" may continue to exist after you have ceased to be aware of them, why refuse to admit the existence of "other animals'" and inanimate things?

exist merely as possible objects of knowledge? And we have seen reasons for denying this. Through conceiving ourselves present as knowers of them, it by no means follows that we thereby create the events themselves; or that they become endowed with the quality of "mentality."

On hearing some idealistic arguments for the dependence of everything on a conscious subject, one cannot help wondering what the respective thinkers mean by consciousness. Some of their expressions, for example, that "all that we know is in consciousness," "all that exists is in mind," or "nothing exists outside consciousness," would lead one to suppose that they conceive it as a vessel or receptacle or huge vat, in which "things are located," or ideas inhere. Is it necessary to point out that the individual consciousness is a periodic phenomenon, dependent on physiological conditions, while of the "soul" conceived of as "something" lying behind certain periodic psychical manifestations, nothing definite can be asserted at all? From the standpoint of scientific method, the assumption of such a supersensible cognitive agency, is, I believe, less justifiable than the assumption of an imperceptible material substratum or substance. The metaphors of "within" and "without" which play so large a *rôle* in certain theories of perception sometimes mislead opponents as well as adherents of Subjective Idealism. Strictly speaking, objects seem to be neither "outside" nor ideas "inside" consciousness, for such expressions imply the application of spatial analogies which are not in this case permissible. A state of consciousness exists in and through the relation of the organism to something different from itself, and ceases when the object to which it has reference disappears. Now, it is quite comprehensible that the same "thing" which becomes an "object" when it enters into the relation, may exist independently of this relation. Indeed, if it had not pre-existed, it could not have entered into the relation at all. Hence, instead of the existence of external things being a consequence of my perception of them, their independent existence is the antecedent condition of their being perceived. To deny this, involves the absurdity, as does Schopenhauer's Theory of Knowledge, of making the individual consciousness create its objects by projecting its ideas outside itself, and of then invoking changes in the objects in order to account for the existence of the sensations. In addition to the destructive circle to which I have already referred, such an "eccentric projection" theory involves a false application of the principle of causation. For, whatever is able to enter into causal relations with *me*, must have existed antecedently to and also independently of this relation; although not necessarily in the same way, *i.e.*, with the same qualities in which it appears in the relation.

But if consciousness consists in the relation of object and subject, and no knowledge is possible except through this opposition (or apart from this relation), so that the subject cannot be conceived apart from the object, and *vice versa,* how, it may be asked, is it possible to ascribe to the objects an existence or reality independently of thought? Granted that we do not require to infer the existence of the object from the subject, that both are equally immediate, still they are real only in and for thought, and thus are nothing but ideas. But here again there is a confusion which Riehl has convincingly exposed, and which consists in arguing from the fact that the "subjectivity" and "objectivity" are relative, to the relativity of their existence apart from this relation. But the fact that "being-subject" and "being-object" are correlative terms, affords no ground for inferring the relativily of the existence either of that which becomes object or that which becomes subject.

It is sometimes said that the idea of the independent existence of things apart from our consciousness leads to a contradiction of thought, or at least involves an improved assumption. Such an objection is misleading, since the independent existence referred to is only another way of expressing the fact disclosed by the analysis of sense-perception that our individual consciousness is not all-sufficient but depends on something else than itself. The senses though active are not self-active, as they must be if the solipsistic hypothesis were true.

An hypothesis may be tested in three aspects, in each of which it is open to attack. 1, Its premises may be false or unproved. 2, The arguments from the premises, whether established or assumed on insufficient evidence, may be invalid. 3, Its consequences may be unacceptable. Considered from each of these standpoints, Solipsism turns out to be a flimsy and ill-conceived philosophical doctrine, for it is liable to damaging criticism in all three directions. The "ego" it starts from and with which it operates is conceived as if it were capable only of thinking or "having ideas." This is not the real "I" of experience which is equally endowed with the functions of feeling and willing. Or, if it takes account of "sensations," it assumes erroneously that these are purely subjective. Were its premises correct, Solipsism could never logically arrive at external realities. The solipsist must remain forever shut up within the charmed circle of his own psychical states. But no solipsist has ever been consistent in this respect; for each has believed in the existence, at least, of beings like unto himself. But a theory which is not consistent with itself has thereby rendered itself doubtful, self-consistency being the minimum requirement we make of a scientific theory. Finally, this same theory clashes with the foundations of science and the necessary assumptions of scientific method.

The independent existence of a reality apart from individual experiences, is alone capable of explaining, and at the same time rendering possible, the agreement that is actually observable between the experiences of different finite percipients. It also alone accounts for a possible continuity of experience through the permanency of the background of the causes of our perceptions. Regarding the character of this reality, no statement need here be made as to whether in the last analysis it is rational, knowable or unknowable. For we are not here concerned with an examination of Idealism in general, or with the establishment of any form of an opposing doctrine. What is outside we may in regard to its nature be material, or spiritual, or partly both, or ultimately neither. Whatever it is, it presents the same problem for the Theory of Knowledge. It is not in *me*; it is not a mere process or a complex of processes of my consciousness. I am rather *in it* and represent one of its many events and particular phases. And the question arises, *how* my consciousness, which is connected with an organism that forms a mere grain of the material universe, and has a beginning and ending in time, can apprehend anything of the true nature of this reality.[1]

[1] An argument to which I have not referred, but which has been urged by A. Riehl against Solipsism, is derived from the existence of altruistic feelings. The existence of other human beings, it may be said, is as real and true as my feelings of sympathy towards them. I have also, in order to avoid undue lengthiness, made no reference to the logical relation between Solipsism and Scepticism, although the connection between them is close and its consideration might be instructive. It might be supposed that no philosopher of repute nowadays believes in Subjective Idealism. Leaving this question of fact undecided, there is much truth in a remark of Mr. Hobhouse's that the arguments urged on behalf of Idealism generally, frequently "assume the position of Subjective Idealism as their premises while they reject it in their conclusions." (*Theory of Knowledge*, p. 537). And I am not sure that Pragmatism, the inadequacies of which have been so well exposed by Professor Taylor in the last number of this Magazine, does not involve both an epistemological and ethical Solipsism.

J. W. A. HICKSON.

ROBERT LOUIS STEVENSON.

There is a well-known sonnet of W. E. Henley's which sums up in brief space the outward man, and some of the mind of his friend, Robert Louis Stevenson. I am glad to quote it by way of frontispiece to my paper. Being an epitome, it naturally leaves much unsaid. A photograph, however good, must be a representation of the original only at a certain fixed point in time, and we shall see how Stevenson outgrew the character here depicted.

> "Thin-legged, thin-chested, slight unspeakably,
> Neat-footed and weak-fingered; in his face —
> Lean, large-boned, curved of beak and touched with race,
> Bold-lipped, rich-tinted, mutable as the sea,
> The brown eyes radiant with vivacity —
> There shines a brilliant and romantic grace,
> A spirit intense and rare, with trace on trace
> Of passion, impudence, and energy.
> Valiant in velvet, light in ragged luck,
> Most vain, most generous, sternly critical.
> Buffoon and poet, lover and sensualist;
> A deal of Ariel, just a streak of Puck,
> Much Anthony, of Hamlet most of all,
> And something of the Shorter-Catechist."

Human nature is, as we all know, a bundle of contradictions, but here is a character in which variableness seems the constant factor, and contradictoriness runs riot. This man was so complex, so many-sided, that, while as yet he had not found the clue to life, he confused himself and confounded his neighbours. The steady growth into prominence, of that part of Stevenson's nature which Mr. Henley charges to the

Shorter Catechism, and the evolution from a sort of chaos of a fine and harmonious personality, is a study which proves most attractive. There is, indeed, so vital a connection between the man and his work, that they can hardly be considered apart, and his writing is pervaded by the fragrance of an irresistible charm which speaks straight to the heart, but fades under description. Much of the earlier work, it is true, stands upon its own merits — the atmosphere of some of the essays collected as *Memories and Portraits* is tranquil and impersonal, and these might have been written by anyone gifted with an observant eye and ear, and a fastidious choice of words. *Virginibus Puerisque* is at times comical in the very aloofness with which the most intimate of relationships and the most discomposing of man's experiences are treated. The author discourses of *Falling in Love* and *Truth in Intercourse* as if he were in a dream, or writing for the inhabitants of Mars. But, as far as I can see, he had not yet fallen in love himself. He had passed through some bitter experiences. A variety of circumstances, the want of harmony between himself and his surroundings, the stress of what he calls a damnatory creed, parental disappointment and disapproval — all these things resulted in a period of tumult and revolt whose violence was commensurate with the originality and intensity of the nature they invaded. It is impossible to read the record of this time of rebellion without keen regret; yet, given his nature and environment, the disturbance was not only inevitable, but profitable. Judged by appearances he would seem to have been nothing better than wayward, eccentric and vain, and he says he was idle. What high sense of duty, true humility, and unflagging industry were included in him, time, trial, and circumstances conspired to bring to light.

Among the other problems of this time the choice of a profession pressed upon him. This is the time of the pencil and the penny notebook — the period of the "sedulous ape." Some of his critics, anxious to warn lovers of Stevenson against the enthusiastic admiration which easily besets them, have told us that here is proof of his weakness; he had not real genius, only talent, and the appreciative imitative faculty; he was no "natural force let loose," rather a refined and beautiful artist, an admirable executant; he had nothing particular to say, and was only anxious to learn how to say it. He will tell you himself, however, what part of his life this was — the time of apprenticeship. "Like it or not," he says, "that is the way to learn to write; so Keats learned." And Sydney Colvin, his mentor and lovingly severe critic, says it was the inward activity and its need of expression that urged him to these exertions, while the ever-receding high ideal kept him and self-satisfaction apart. His attempts were not soon crowned with success in the material

sense. To read the articles which were rejected by the magazines of the day is enough to shake one's respect for editors, and may even in certain circumstances prove a salve to wounded vanity.

All this time Stevenson was steadily perfecting himself in his art and by degrees gaining recognition and welcome. The man, too, was beginning to shine through the work, and from the time of *Ordered South* they cannot be dissociated. What has been called "the intolerable pathos" of that essay is a bit of the writer's own life, and its complement may be found in that stirring trumpet-call *Aes triplex*. The naturalistic side presents itself in *The Pipes of Pan*, and its antidote in *The Celestial Surgeon*, and the forward look of *El Dorado*. For it is a notable circumstance that in this many-sided character complementary qualities exist almost unfailingly side by side, uniting like the colours of the spectrum, in the white light of truth.

Like other men, Stevenson began to complete his education only when he fell in love. "To love," he cries, "is the great amulet that makes the world a garden; and hope, which comes to all, outwears the accidents of life, and reaches with tremulous hand beyond the grave and death. Easy to say; yea, but also by God's mercy both easy and grateful to believe." The obstacles in the way were apparently insuperable, including separation of the lovers by an ocean and a continent, the inability of the gentleman to earn even his own bread, the necessity of the lady's obtaining a divorce. But these difficulties were all overcome. Stevenson brought his wife from San Francisico to the other side of the Atlantic, and all misunderstandings with his parents finally cleared away, all discord in his life resolved in sweetest harmony, his nature opened out and blossomed as the rose. There appears now in his character a strain of firmness which had been somewhat wanting, and for lack of which he had been driven by the wind and tossed. "I remember (he says) a time when I was very idle. . . . I have had a thousand skirmishes to keep myself at work on particular mornings, and sometimes the affair was lost; but of that great change of campaign which turned me from one whose business was to shirk into one whose business was to strive and persevere, it seems as though it had been done by someone else. I came about like a well-handled ship. There stood at the wheel that unknown steersman whom we call God." The inherent strength and sweetness of his nature appeared. The Shorter Catechist in the *spiritual*, not the *dogmatic* sense developed and increasingly leavened the whole man, till, when he left us, it was with the record of a life adorned by a shining courage, a self-forgetfulness, chivalry and kindness which passed undimmed through all the discouragement and temptation that attend continuous invalidism and the life-long quest of health. It was

not merely an affair of temperament or physical organization, his indomitable gaiety; he willed to be cheerful, to be happy and a source of happiness to those about him. Down the ages there comes a voice whose full significance does not always reach us, dulled as we are by familiarity with its message — "I have learned in whatsoever state I am therewith to be content." It is not an easy lesson. It requires concentration of mind and will, and the obedient heart of the little child. But there was about Stevenson a singular childlikeness that remained unaffected by all the vicissitudes and developments of his life. It finds its most definite expression in the *Child's Garden of Verses,* a book that stands alone as the mirror of the mind of a child. The old poet, Vaughan, must have had visions of something like it when he wrote of

CHILDE-HOOD.

"I cannot reach it; and my striving eye
Dazles at it, as at eternity.
Were now that chronicle alive,
Those white designs which children drive,
And the thoughts of each harmless hour
With their content, too, in my power,
Quickly would I my path make even
And by meer playing, go to Heaven."

Indeed, to read through the *Child's Garden* is to wipe out the records of experience and to be a child again. In that book truly, "everlasting Spring abides, and never-withering flowers." And it is the same eager fresh unsullied spirit that cries—

"Wanted Volunteers
To do their best for two-score years!"
"A ready soldier here I stand
Primed for thy command,
With burnished sword.
If this be faith O Lord
Help thou mine unbelief
And be my battle brief."—

It was only in 1881, and by a kind of chance, that Stevenson fell upon romance-writing, wrote *Treasure Island,* and became famous. For one thing, if there had been nothing more, his generation owes him a debt of gratitude — he set the fashion of the purely romantic novel, in

which the reader is carried away by the excitement of the story; character-painting is confined to the behaviour of ths characters, and problems do not exist. One kind of problem was necessarily absent, at least from *Treasure Island.* In his account of the genesis of that book he summarily disposes of it—"Women," he says, "were excluded."

The difference between Stevenson and contemporary authors is not that he knew less about women than they, but that he knew his ignorance. In an early (and rejected) essay on *Some Portraits by Raeburn,* after specifying their points of failure, he disposes of the younger women with the sentence that they are "the typical young ladies of the male novelist," and long afterwards he puts into the mouth of David Balfour the illuminating confession — "I wondered at the simplicity of woman, from whom I felt in those moments I was not worthy to be descended. The sex thanks and respects him for his diffidence. His silence falls gratefully on ears wearied by masculine banalities. We are reminded of David Balfour's protestation to Catriona, superficially so stilted, really the essence of chivalry — "The Lord do so unto me and more also, if I either fail you or fash you." And when at length Stevenson does create women, they are creatures who satisfy the requirements of their own sex.

As well as setting the fashion in romance-writing Stevenson originated a distinct style, in which he has many imitators, but no equal. Its striking characteristic is a certain vitality which he avowedly made it his object to attain, and did successfully maintain. Its general effect is the result of many different qualities, all of which were present in him. Keen, or, as he calls it, intense perception, minute observation and accurate recollection insured to him vivid mind-pictures alike of the past and the present in his own experience, while the scenes and situations created by an imagination extraordinarily subtle and acute were no less clear. Vivid word-painting in its turn was the natural outcome of truthfulness of representation, quick apprehension of the main points, and an unerring sense of the right word — a fastidious choice, indeed, in "words of vital aptness and animation." The extreme susceptibility of his nature and his keenness of physical sensation might easily have betrayed him into an extravagance of language enervating rather than inspiring to the reader. But he was armed against that danger by a high austerity of soul, a Puritan self-denial which, recognizing the ease with which sense may be transformed from a good servant to a bad master, impressed his style with a certain severity and sense of reserve. Like Browning's Rabbi he would say

"All good things
Are ours, nor soul helps flesh more, now, than
flesh helps soul!"

It is always an interesting thing to see an artist at work, and some of the means which Stevenson used in the perfecting and individualization of his style are on the surface of his work. In the first place there is, of course, the finest and most fastidious sense of the fitness of words, the gift of felicitous expressions, and unwearied perseverance in improvement. In this he resembles Tennyson, who again points us back to

> "Old Virgil, who would write ten lines, they say
> At dawn, and lavish all the golden day
> To make them wealthier in his readers' eyes."

I do not know how it may be with Virgil, but the other two very occasionally show the defect of their quality, and we become aware of over-elaboration. This, however, is an occurrence very rare. Stevenson has many devices for arresting attention and driving his point home. One of the most effective is the use of Latin words in their original derivative meaning, as in the lines

> "Yet when the lamp from my expiring eyes
> Shall dwindle and recede, the voice of love
> *Fall insignificant on my closing ears* ——"

Is not the whole tragedy of Love and Death in that line? Pushing this idea a little further, you may have descriptions in words suitable to some analogous sensation, as when the saloon of a ship is said to be hung round with reverberating mirrors, or the odour of a forest is compared with the rude pistolling smell of the sea. Again, he secures a striking effect by unexpected combinations of words, sometimes mutually contradictory, as when David Balfour, gazing on the gibbeted corpse, "stood drinking in discomfort"; or when evening falls upon the holiday-maker, his body full "of delicious pains"; or when people hearing of courageous deeds are "abashed into high resolutions." This is one of his most characteristic touches, amounting almost to a mannerism, and betraying imitators into sad blunders, since it is an accomplishment beyond any but a master-hand.

Sometimes he employs the technical terms of the engineer, at whose meaning the uninitiated can only guess, but whose sound helps the general effect, for instance, in the lines on the Skerryvore light —

> "There
> Eternal granite, hewn from the living isle
> And dowelled with brute iron, rears a tower
> That from its wet foundation to its crown
> Of glittering glass, stands, in the sweep of winds
> Immovable, immortal, eminent."

Or a short graphic simile brings the scene before our eyes, as, when David Balfour says, "I stood before her like a stopped clock."

All those devices, and a certain conscious directness are, no doubt, tricks of the trade; they do not involve creative power. But creative power was not lacking in Stevenson even in his youth; it was only dormant, and in the meantime he, ike Keats, had learned to write. He knew how to use his instrument. His finished work sparkles and shines like the finest product of the jeweller's art, each gem cut and polished, glowing with colour, glancing with light, and every one enhancing the beauty of the rest.

Cosmopolitan by force of circumstance and the pressure of necessity, Stevenson was at heart a true Scot —"touch me, and you shall find the thistle"— and he retained throughout life what he calls a Scottish accent of the mind. We may, therefore, be pardoned if we claim for his fellow-countrymen a more delicate appreciation of his flavour than can in the nature of things he enjoyed beyond the Scottish Border. He was not free of the national self-consciousness, and his Scotch accent of mind is quite pronounced in the account he gives of his landing at the leper settlement on Molokai. There were lepers in the boat, and two Sisters of Mercy, who had devoted their lives to the work of nursing the sufferers from that loathsome disease. He writes, "I do not know how it would have been with me had the Sisters not been there. My horror of the horrible is about my weakest point, but the moral loveliness at my elbow blotted all else out, and when I found that one of them was crying, poor soul, quietly under her veil, I cried a little myself; then I felt as right as a trivet, only a little crushed to be there so uselessly . . . . I turned round to her and said something like this: 'Ladies, God Himself is here to give you welcome — I'm sure it is good for me to be beside you, and I hope it will be blessed to me. I thank you for myself, and the good you do me . . . .' I made my speech partly because I was ashamed to do so, and remembered one of my golden rules, 'When you are ashamed to speak, speak up at once.' But, mind you, that rule is only golden with strangers; with your own folks there are other considerations." I am sure this confession finds an echo in every Scottish heart.

Theology and metaphysics, the ideal Scottish pursuits, were in him qualified by wide toleration and sympathy and an acute sense of the actual, but the passion of patriotism was of the keenest; and I understand that to realize the poignancy of the longing to which he gives expression, you must yourself be an exile from the "grey huddle of hills." He calls it a wrench even to be buried under alien sod. "If I could only be buried in the hills under the heather and a table tomb-

stone like the martyrs where the whaups and plovers are crying! Singular that I should fulfil the Scots destiny throughout, and live a voluntary exile, and have my head filled with the blessed, beastly place all the time!"

His head *was* filled with it — it was at Vailima, with its sunny skies, soft airs, and windless days, in his ears "the pulse of the besieging sea," that he wrote —

"Blows the wind to-day and the sun and the rain are flying,
Blows the wind on the moors to-day and now
Where about the graves of the martyrs the whaups are crying
My heart remembers how!

Grey recumbent tombs of the dead in desert places,
Standing stones on the vacant wine-red moor,
Hills of sheep, and the homes of the silent vanished races,
And winds, austere and pure.

Be it granted me to behold you again in dying,
Hills of home! and to hear again the call;
Hear about the graves of martyrs the peewees crying,
And hear no more at all."

As for Edinburgh, her very stones to him were dear. "I was born within the bounds of a city illustrious for her beauty, her tragic and picturesque associations, and for the credit of some of her brave sons. Writing as I do in a strange quarter of the world, and a late day of my age, I can still behold the profile of her towers and chimneys and the long train of her smoke against the sunset. I can still hear those strains of martial music that she goes to bed with, ending each day like an act of an opera to the notes of bugles . . . . It is the beautiful that I recall, the august airs of the castle on its rock, nocturnal passages of lights and trees, the sudden song of the blackbird in a suburban lane, rosy and dusky winter sunsets, the uninhabited splendours of the early dawn, the building up of the city on a misty day, house above house, spire above spire, until it was received into a sky of softly glowing clouds, and seemed to pass on and upwards, by fresh grades and roses, city beyond city, a New Jerusalem, bodily scaling heaven."

Yet how he recalls the horrors of the Edinburgh climate — "the laggard morn, the haggard day." And when he has caused unregenerate joy in the West by an unsparing criticism of the weaknesses of his native city, with what menace he turns on the rivals of Edinburgh — "I have not written a book on Glasgow yet!"

With this keen patriotism, this rooted and grounded love of country,

he was destined to live and die an exile. Perhaps his life was really more useful, and exercised a wider and more beneficial influence than would have been possible at home; perhaps his own character developed more favourably in that atmosphere than it might have done there. In the Vailima Letters, written to Sydney Colvin, we are admitted to the privilege and pleasure of intimate acquaintance with Stevenson. We can trace the play of many diverse qualities and their union in an attractive and winning possibility. "To those about him," says Mr. Colvin, "he remained the impersonation of life and spirit, maintaining to the last the same charming gaiety as ever, the same happy eagerness in all pursuits and interests, and fulfilling without failure the words of his own prayer, 'Give us to awake with smiles, give us to labour smiling; as the sun lightens the world, so let our loving kindness make bright this house of our habitation'"!

He went to the grave at last, crowned with love and the honour that love bestows, and we gratefully join hands with the Samoan chiefs who expressed their allegiance in a visible form and ours in a figure, when they cut out for Tusitala the Road of Loving Hearts.

META PETERSON.

UNIVERSITY PUBLICATIONS, SESSION 1903-1904.

Books and Papers published by Members of the University Staff since the beginning of last Session.

This list does not include non-technical articles published in local journals A supplementary list will be published in the next number of the Magazine.

DEPARTMENT OF CLASSICS.

PRINCIPAL PETERSON. Quintiliani Institutionis Oratoriæ, Liber X, Oxford, at the Clarendon Press; Second Edition.

Classical Review. Articles on (1) The Cluni Codex of Cicero; and (2) Emandations of Cicero's Verrine Orations.

A School Poetry Book—New Impression. Longmans, Green & Co.

National Education. An Address delivered before the Ontario Education Association, 5th April, 1904.

MACNAGHTEN, R. E. Is Free Trade a Fallacy? Economic Review, London, Jan., 1904.

DEPARTMENT OF ENGLISH.

CUNLIFFE, J. W., D.Lit. Selections from Nineteenth Century Prose. Edited with notes. Copp, Clark Company, 1904.

Poems of the Romantic Revival. In association with Miss S. E. Cameron, and with Prefatory Note by Charles E. Moyse. Copp, Clark Company, 1905.

DEPARTMENT OF MODERN LANGUAGES.

GREGOR, L. R., PH.D. Translation. (School Review, University of Chicago.)

Die Journalisten, Comedy by Gustav Freytag, ed. with introduction, translation exercises, notes and complete vocabulary. Ginn & Co., Boston, 1905.

Die Harzreise, ed. with notes. Ginn & Co., Boston, 1903.

La Mare au Diable, with introduction, notes and vocabulary. Ginn & Co., Boston, 1903.

DEPARTMENT OF PHILOSOPHY.

CALDWELL, W., M.A., D.Sc. Recent Tendencies in American Philosophy. The Critical Review, Scotland, London, Dec., 1904.

TAYLOR, A. E. Elements of Metaphysics. London, Nov., 1903. (Methuen & Co.).

DEPARTMENT OF ECONOMICS.

FLUX, A. W. Economic Principles. Methuen & Co., London, 1904. 8vo., pp. 324.

Preferential Tariffs and Canadian Interests. Economic Journal, Dec., 1903.

Letter from Canada. (Export Trade Routes.) Economic Journal, Mar., 1904.

Britain's Place in Foreign Markets. Economic Journal, Sept., 1904.

The Variation of Productive Forces, Further Comment. Quarterly Journal of Economics, Feb., 1904.

The Condition of British Industry. Journal of the Canadian Bankers' Association, Jan., 1904.

The Bank of England's Reserve. Journal of the Canadian Bankers' Association, April, 1904.

The End of Bimetallist Agitation. Journal of the Canadian Bankers' Association, Oct., 1904.

DEPARTMENT OF PHYSICS.

BARNES, H. T., D.Sc. The Mechanical Equivalent of Heat measured by Electrical means. St. Louis Congress, Sept., 1904.

The Weston Standard Cell. In association with Mr. A. S. B. Lucas. Journal Physical Chemistry.

The Artificial Production of Frazil Ice with relation to Temperature Conditions in the Water. Transactions Royal Society of Canada.

The Growth of Ice in the Bunsen Ice-Calorimeter. In association with Mr. A. S. B. Lucas. Transactions Royal Society of Canada.

BROOKS, MISS H. A volatile product of Radium. Nature.

Decay of Excited Radio-Activity of Thorium, Radium and Actinium. Philosophical Magazine.

COX, PROF. J. Mechanics, University Press, Cambridge (in the new Physical Series), May, 1904.

EVE, A. S. Comparison of the Ionization produced by Roentgen Rays and the Rays of Radium. Nature.

Secondary Radiation produced by the $\beta\gamma$ and Rays of Radium. Nature.

RUTHERFORD, E., D. Sc. The Heating Effect of Radium Emenation. In association with Dr. H. T. Barnes. Nature and Phil. Magazine.

Does the Radio-activity of Radium depend upon its Concentration? Nature.

The Succession of Changes in Radio-active Bodies. The Bakerian Lecture. Trans. Royal Society.

Slow Transformation Products of Radium. Electrical Congress, St. Louis. Sept., 1904.

Radio-activity. University Press, Cambridge (in the new Physical Series).

STANSFIELD, A., D.Sc. Electro-Thermo Production of Iron and Steel. Transactions of the Canadian Society of Civil Engineers, Vol. XVIII, part 1.

The Electric Smelting of Refractory Ores. In association with Mr. L. B. Reynolds.

DEPARTMENT OF GEOLOGY AND PALÆONTOLOGY.

ADAMS, F. D., PH.D. On a new Nepheline Rock from the Province of Ontario, Canada. American Journal of Science. April, 1904.

Mellard Reade on the Evolution of Earth Structure. (Review) Science, August 12th, 1904.

Washington on the Chemical Analysis of Igneous Rocks. (Review) Science, Oct. 9th, 1903.

WILSON, A. W. G. The Laurentian Peneplain. Chicago Journal of Geology, Vol. XI, No. 7, Oct.—Nov., 1903.

Report on a traverse through the Southern Portion of the District of Keewatin from Lac Seul to Cat Lake. Canadian Geological Survey Report. (In press).

A Geological Reconnaissance about the head-waters of the Albany River. In Summary Report of the Geological Survey Department for the calendar year 1902. Published in Nov., 1903.

The Theory of the formation of Sedimentary Deposits. Canadian Record of Science, Vol. 8, No. 2, for July, 1903.

Cuspate Forelands along the Bay of Quinté. Chicago Journal of Geology, Feb.—March, 1904.

Trent River System and St. Lawrence Outlet. Bulletin Geological Society of America, Vol. 15, May, 1904.

DEPARTMENT OF BOTANY.

PENHALLOW, D. P., D.Sc. Notes on the Tertiary Flora of Canada. Transactions Royal Society of Canada, IX, iv, 1903, 33-95.

International Catalogue of Scientific Literature—Botany. Review. Can. Rec. of Sc., IX, 1903, 139.

Review of Palæobotanical Literature for the year. Botanisches Centralblatt.

The Anatomy of the North American Coniferales, together with certain exotic species from Japan and Australasia. American Naturalist, XXXVIII, 1904, 243-273; American Naturalist, XXXVIII, 1904, 331-359; American Naturalist, XXXVIII, 1904, 523-554.

Notes on Tertiary Plants from Canada and the United States. Transactions Royal Society of Canada, X, iv., 1904.

DEPARTMENT OF ZOOLOGY.

MACBRIDE, E. W., D.Sc. The early Stages in the Development of Ophiothica Fragilis. American Zoological Society, Philadelphia, 1904.

STAFFORD, J. Two Distomes from Canadian Urodela. Centralblatt fur Bakteriologie, Parasitenkunde u.s.w. Jena, Oct., 1903.

The Freshwater Fishes brought to Montreal Markets. (Read before the Natural History Society of Montreal.)

Trematodes from Canadian Fishes. Zoologischer Anzeiger, Leipzig, Mai, 1904.

DEPARTMENT OF CHEMISTRY AND MINING.

HARRINGTON, B. J., PH.D. On the Formula of Bornite. American Journal of Science, Vol. XVI, August, 1903, New Haven, Conn.

STEELE B. D., D.Sc. A Dynamical Study of the Friedel-Crafts Reaction. Transactions of the Chemical Society, Vol. 84, London, Dec., 1903.

The Solubility curves of the Hydrates of Nickel Sulphate. In association with F. M. G. Johnson. Transactions of the Chemical Society, Vol. 85, London, 1904.

WALKER, J. W., PH.D. Ionization and Chemical Combination. Transactions of the Chemical Society, Vol. 85, London, 1904.

Ionization and Chemical Combination in the Liquified Halogen Hydrides and Hydrogen Sulphide. In association with Mr. Douglas McIntosh and Dr. E. H. Archibald. Transactions of the Chemical Society, Vol. 85, London, 1904.

Some Compounds of Aluminium Chloride with Organic Substances containing Oxygen. In association with Mr. Arthur Spencer. Trans. of the Chemical Society, Vol. 85, London, 1904.

ARCHIBALD, E. H., M.D. The Basic Properties of Oxygen. Additive Compounds of the Halogen Acids and Organic Substances and the Higher Valencies of Oxygen. Asymmetric Oxygen. In association with Mr. Douglas McIntosh. Transactions of the Chemical Society, Vol. 85, London, 1904.

MCINTOSH, D. On the Liquified Hydrides of Phosphorus, Sulphur and the Halogens as conducting solvents. In association with Dr. B. D. Steele. Proceedings Royal Society, Vol. 73, 1904.

DEPARTMENT OF ELECTRICAL ENGINEERING.

HERDT, L. A. Polyphase Equipment of some European High Speed Electric Railways. Canadian Society Civil Engineers, 1903.

Electrical Equipment of the Lachine Canal. Canadian Society Civil Engineers, Electrical Section, 1904.

COKER, E. G., D.Sc. The Measurement of Stress by Thermal methods, with an account of some experiments on the Influence of Stress on the Thermal Expansion of Metals. Trans. Royal Society of Edinburgh, 1904.

On the Relation of Thermal Change to Tension and Compression Stress, with an account of some experiments on Impulsive Stress. In association with Mr. C. M. McKergow. Proceedings Royal Society of Canada, 1904.

Recent researches on the effects of Stress upon Metals. Canadian Railway Club, 1904.

An Apparatus for Measuring Lateral Strain, with an account of some experiments on the Determination of the Values of Poisson's Ratios for Metals.

The Distribution of Pressure of a Jet Impinging on a Hemispherical Cup, and the efficiency of Flat and Curved Vanes.. In association with G. G. Gale.

DEPARTMENT OF MINING ENGINEERING.

ATKINSON, M. B., B.Sc. The Regent Group of Mines, Negaunee, Mich. Canadian Mining Institute.

CAMPBELL, C. G., B.Sc. Mine Timbering in Section Sixteen Mine, Ishpeming, Mich. Canadian Society of Civil Engineers.

CARLYLE, E. J., B.Sc. The Pioneer Iron Mine, Ely, Minn. Canadian Mining Institute.

FORBES, H. L. Chlorination at the North Brookfield Mine, N.S. Canadian Mining Institute.

HALL, O., B.Sc. The Elmore Oil Process for Concentration of Ores. Canadian Society of Civil Engineers.

PARLEE, N. W., B. Sc. Methods of Mining and Timbering Large Ore Bodies. Canadian Society of Civil Engineers.

PORTER, J. B., PH.D. Recent Advances in Mining and Ore Dressing Practice. Presidential Address before Mining Section of Canadian Society of Civil Engineers.

The Relation of Power consumed in Crushing Rock to the Size and Surface of the Fragments Produced. In association with Mr. de Pencier and Mr. J. M. McPhee.

ROBERTSON, J. F. The Flow of Water on Inclined Planes. In association with N. W. Parlee. Canadian Society of Civil Engineers.

FACULTY OF LAW.

McGOUN, A. (K.C.). A Revenue Tariff with the Empire. Montreal.

WALTON, F. P. Historical Introduction to the Roman Law. Green, Edinburgh.

The Organization of Justice in France—Two articles. Law Quarterly Review, London, July, 1903; Oct., 1903.

The New German Code. Juridical Review, Edinburgh, June, 1904.

FACULTY OF MEDICINE.

ADAMI, J. G., M.D. On the Part Played by Heredity, and upon the extent to which Morbid Conditions are Inherited. Montreal Medical Journal, April, 1903.

Exogenous Perforative Ulceration of the Intestines. Montreal Medical Journal, June, 1903.

On a simple Method of Isolating from Water Forms which agglutinate with Typhoid Serum. American Association of Pathologists and Bacteriologists, April 2, 1904, N. Y.

ARMSTRONG, G. E., M.D. Typhoid Perforations, their diagnosis and treatment. Chicago Surgical Association.

Hypertrophy of the Prostate; Pathology, Etiology and Treatment. Ottawa Medical Association.

Single Ulcer of the Urinary Bladder, non-Tubercular, non-Malignant, with Report of Cases. American Association, Washington 1903.

BIRKETT, H. S., M.D. Syphilis of the Larynx, Trachea and Bronchi. Buck's Reference Handbook of Medical Sciences, 1903.

Diseases of the Oro-and-Naso Pharynx. (Diseases of the Nose, Throat and Ear, Vol. II, Wright), 1903.

Rhinoliths. Montreal Medical Journal, 1903.

Salivary Calculi. Montreal Medical Journal, 1904.

Lupus of the Oro-Pharynx, and Naso-Pharynx. Transactions American Laryngological Association, 1904.

Otomycosis due to the Aspergillus Glaucus, in conjunction with Dr. A. G. Nicholls, Montreal Medical Journal, May, 1904.

BULLER, F., M.D. Poisoning by Wood Alcohol. Journal of the Medical Association, Chicago, Ill., Oct., 1904.

CHARLTON, G. A., M.D. A Study of Chronic Infection and Subinfection by the Colon Bacillus. Part II. American Association of Pathologists and Bacteriologists, April 2, 1904.

KLOTZ, O. A Hitherto Undescribed Epizootic among Rabbits and Rats, caused by a Flagellate Micrococcus. American Association of Pathologists and Bacteriologists, April 2, 1904.

On a Bacillus isolated from water and agglutinated by high dilutions of typhoid serum. American Association of Pathologists and Bacteriologists, April 2, 1904.

Carcinoma of the Bile Papilla. Montreal Medical Journal, July, 1904.

On the Leucocytosis in Scarlet Fever. The Journal of Infectious Diseases, Chicago, Vol. I, No. 3, May 30, 1904.

LOEB, L. On the Coagulation of the Blood of some Anthropods, and on the Influence of Pressure and Traction on the Protoplasm of the Blood cells of Anthropods. Biological Bulletin, Wood's Holl, Mass., Vol. IV, No. 6, May, 1903.

The Influence of Certain Bacteria on the Coagulation of the Blood. Journal of Medical Research, Vol. X, Dec., 1903.

Ueber die Bedeutung der Blutkörperchen für die Blutgerinnung und die Entzündung einiger Arthropoden und über mechanisch Einwirkungen auf das Protoplasma dieser Zellen. Virchows Archiv., 1903.

Ueber Transplantation von Tumoren. Virchows Archiv., 1903.

MARTIN, C. F., M.D. Diseases of the Stomach. The Reference Handbook of the Medical Sciences, N. Y., Vol. VII, 1904.

NICHOLLS, A. G., M.D. A Simple Method of Demonstrating the Presence of Bacteria in the Mesentery of Normal Animals. American Association of Pathologists and Bacteriologists, April, 1904.

Thrombosis. The Reference Handbook of the Medical Sciences, New York, Vol. VII, 1904.

Dwarfism. The Reference Handbook of the Medical Sciences, New York, Vol. VIII, 1904. (Appendix.)

Gigantism. The Reference Handbook of the Medical Sciences, New York, Vol. VIII, 1904. (Appendix.)

SHEPHERD, F. J., M.D. A Rapid Method of Diagnosis in Leprosy. Journal of Cutaneous Diseases, New York, Oct., 1903.

Three Cases of Typhoid Ulcer successfully operated upon. Montreal Medical Journal, Jan., 1903.

Treatment of Aneurism of the External Iliac Artery by Digital Compression. Annals of Surgery, Phila., Oct., 1903.

Obstruction of the Bowel by a large Gall, removed successfully by operation. Montreal Medical Journal, April, 1903.

Surgical Anatomy of the Shoulder. Surgical Anatomy of the Perineum. Buck's Reference Handbook of the Medical Sciences, New York, 2nd ed., 1904, Vol. VII.