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PREFACE

THE majority of the articles contained in this book appeared in *The Student*, the official magazine of Edinburgh University, in Session 1907-1908. The series was suggested by Mr Basil H. Watt and the arrangements were supervised by Mr A. F. Giles (now Lecturer in Ancient History). The idea of publication in volume form was brought forward more than once, but on each occasion it was dropped. When the Students' Representative Council decided finally to republish the series it was felt that the list should be somewhat expanded, and this has been done, though for reasons of time and space it is still far from being exhaustive.

The reader will find in the articles, many of them written by famous Edinburgh students of a later date, a number of interesting facts connected with the earlier days of our Alma Mater. For example, it is food for thought to note that Carlyle walked a hundred miles to his first matriculation and that Nasmyth was enabled to pay his class fees with the proceeds of his model-making. Medicals of the present generation will be interested in the concise entries of James Y. Simpson's cash-book, *e.g.*, "Finnen Hadies 2d. and Bones of the Leg £1, 1s.," and in the fact that Materia Medica left on the mind of Charles Darwin "nothing but the memory of cold breakfastless hours on the properties of rhubarb." Students of literature will shudder at the narrow escape Johnson had when, but for the intervention of the Duke of Argyll, Boswell would have received a commission in the Guards, and a de-

scription of Oliver Goldsmith's wardrobe would make many sigh for the brave days of old, were it not for the fact that the picture of the "Assemblies" of the eighteenth century seems scarcely so inviting.

So in the earlier struggles and experiences here portrayed of these illustrious sons, we have an insight into their lives which endears to us both themselves and the University whose fame they have helped to establish. It is our hope that this little book may bring those of our own time to a knowledge of and an intimacy with these alumni who are too often forgotten or neglected to-day.

In closing, it remains only for me to record my thanks to those to whom I am indebted in the compilation of this volume. The goodwill of the original contributors has alone made the volume possible, and the new articles have been written at short notice and with no mention of inconvenience by Dr Bruce, Dr Knott, Mr Horsburgh, Rev. Mr Crockett, Mr J. Ian Macpherson, and Mr Blyth Webster. To these many and distinguished authors is due any merit which the volume possesses, while for the mere preparation and arrangement of their work, as an official of the Students' Representative Council, I append my name.

W. Scott Stevenson

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DEN ❧ BY A. BLYTH WEBSTER

". . . studia hilaritate proveniunt . . ."

DRUMMOND OF HAWTHORNDEN

BY A. BLYTH WEBSTER

HE came to the University from the High School in his sixteenth year, and on July the twenty-seventh, 1605, departed with a Mastership. Of his qualities as pupil, of his love of books, so gentle, tolerant, mingled, and so fruitful, and of certain lovable habits found early and at all times in his life, Bishop Sage tells us in the brief unaffected Memoir which begins the Folio of 1711. "The early signs of that worth," he says, "which afterwards appeared to the world were very conspicuous," and again, "his greatest familiarity and conversation was with the University men and men of learning." He is said to have understood well the common metaphysical learning which then obtained in the schools, yet not to have taken up all his time that way, for he "applied some of it to the reading of the Classic Authors and of Mathematics." The University of his day, gaining its majority in the year in which he entered it, taught in Theology and Arts only, and offered no training for the lawyer's life his father, it would seem, had determined for him; so he was sent abroad for four years to study civil law at Bourges and Paris, "being then twenty-one years of age and of more sense and better instructed in letters than many of his years." Sage *says* that he did this with great diligence. But as a list in our Library, in his own hand, of the books he read during these years contains but one work of jurisprudence—Justinian, it is probable that he studied law less than poetry. And in another passage in Sage

we may read that "he neither loved the fatigue nor harshness of the Law, though it indeed brings great gain and advantages along with it; for the delicacy of his wit always run on the pleasantness and usefulness of History, and on the Fame and softness of Poetry."

One of his teachers, Mr John Ray, Professor of Humanity, Drummond praised in a sonnet written to the memory of this "much loving and beloved master." The Professor who thus came to be praised by a poet, and for his verse albeit Latin, and who was charged at the desire of another poet, Sir William Alexander of Menstrie, with the collection of the Scottish Poets who had written in Latin, wrote once of Drummond's mother, herself a poet's sister, praising her in default of other merits, it seems, for being mother to her son. *Quis Semelem nosset si non genuisset Iacchum?* is the unobstrusive and questioning tribute of this Latinist. Between this mother and her son, it should be said, there was some unpleasantness and a legal proceeding. Yet she was stated, again by Sage, to be "a woman of excellent breeding and of good and virtuous life." Mr Ray in his turn was celebrated by his pupil, a little playfully in the fashion of the time, and with puns to which his name lent obvious occasion. He is then "the priest of Phoebus" and "of Latin Muses greatest praise": but in a later line appears also as "Quintilian once more dead again"—which makes one doubtful.

Drummond, we may believe, was a true student, responsive to the Phœbus if not to the Quintilian in

the "soul which so many souls did frame." Listen to the helpful Sage:—"Having passed his course at the University, he did not, according to the commom custom, give over reading, or think that he had a full stock of learning, as a great many vainly imagine: he had more sense and knew better things; that the short time spent at schools and colleges is only designed to begin youth in their studies, and set just rules and true methods for the prosecuting them. So he continued close some years reading the solid and unaffected authors of Antiquity, which he not only retained in his memory, but digested in his judgment: which was of great use to him afterwards, as may be seen frequently in his excellant works both in prose and verse. . . . He was not much taken up with the ordinary amusements of dancing, singing, playing, etc., though he had as much of them as a well-bred gentleman should have, and when his spirits were too much bended by severe studies, he unbended them by playing on his lute, which he did to admiration."

His father's death in 1610 having removed the only reason for continuing the unwelcome study of Law, he retired in his twenty-fifth year to Hawthornden, "a sweet and solitary seat, and very fit and proper for the Muses; and fell again to the studying the Greek and Latin authors." 'Tis true, Sage goes on, "he loved Obscurity and retirement for which he was mightily to blame; for it's a great disparagment to Virtue and Learning that those things which make men useful to the world, should incline them to go

out of it. But this liberty ought to have been granted to him as soon as to any man; for he did not spend his time in ease and indolence with a design only to please himself but withdrew out of the crowd with desires of enlightening and instructing the minds of those that remained in it."

This life of careful seclusion and so gracious study and of a suavity, which was itself perhaps part of the good fortune of his genius, was, at the end only, broken in upon by political and sectarian trouble. He lived aloof, travelling little or not at all, and spent his solitary energies in a continual service of his art. He married in his forty-sixth year, and had many children; rebuilt his house; wrote topical pamphlets and some history; took out patents for twenty-seven ingenious inventions; and was the close friend of poets, Drayton's correspondent and Ben Jonson's host. He cared nothing for preferment, avoiding rather than seeking it, and writing of riches in his CYPRESS GROVE, "They are like to thorns which, laid on an open hand, are easily blown away, and wound the closing and hard gripping." In 1627 he gave to the University—adding further to the gift in 1628 and 1630—some five hundred volumes in various languages, and a few manuscripts. In this collection a Latin catalogue was afterwards supplied, containing a translation of what appears in the 1711 volume as a brief essay of but a page, in English, OF LIBRARIES.

And of this scholar and recluse, this ardent student of the books, the art, the poetry of the Classic world,

and even more ardently of the age of the Renaissance, a Bishop, remember, was able to write:—"He never thought religion consisted in peevishness or sourness of mind: on the contrary his humour was very jovial and cheerful, especially among his friends and comrades, with whom sometimes he took a bottle only *ad hilaritatem*, according to the example of the best of the ancient and modern poets, for the raising his spirits, which were much flagged with constant reading and meditation; but he never went to excess or committed anything against the rules of religion and good manners."

Meis libris, meis oculis contentus—Bishop Sage transfers them to Drummond, these words of that perfect humanist of the fifteenth century, Pico Della Mirandola. To such an artistic temper what is local, what is visible, counts for so much that it may be almost said to count for everything. To find the formula for Drummond there is no way so sure as that of pilgrimage from Roslin Chapel by the banks of the Esk to Hawthornden, and thence to Lasswade Church. Here were his true sources, his inspiration. Here was his life. Here, early in it, he met and mourned a love. Here he wrote one of the most melodious descants ever consecrated to the majesty of Death, in prose that foreshadows and is not shamed by Sir Thomas Browne's. Here was his "green mother in the shady grove."

> "Here Damon lies, whose songs did sometimes grace
> The murmuring Esk; may roses shade the place."

There are those who deny to the Elizabethan sonnet any measurable sincerity or personal veracity in its expression of emotional experience; who will occupy themselves, and rest content, with such denouncing phrases as "mosaic of plagiarism," "medley of imitative conceits," "fashionable exercise in Arcadianism" and the like; or attempt even to dismiss it, in Ben Jonson's manner at Hawthornden himself, as exotic—a tissue of words and phrases stolen from Italy and France. And, in a slight sense, the sonneteers themselves give evidence against their own form; Gabriel Harvey and Chapman writing parodies of the prescribed convention, Davies grumbling at those "base rhymers who daily beget bastard sonnets to their own shames and poetry's disgrace," Drayton freely admitting his own and deriding others' borrowings, Watson so brazenly publishing his subservience to foreign models. Yet it must be obvious, one would think to the least happy of critics, how merely captious it is to draw anything in the nature of final inference from the derivative elements in the sonnet's vogue. Its habit, certainly, like that of the ceremonial and etiquette it partly mirrored, was the monopoly of a minority, of Sidney's circle and its followers, who fathered it on a motley company of poets first, then poetasters. And a poetic mode thus limited and defined, with the resulting commonalty of thought and idea, and with a poetical citizenship that did imply fixed ordinances, naturally and too soon became a more or less frivolous convention. So that the sonnet

came to be indeed an instrument, susceptible on the one hand of a wonderful polish and cunning of hand, and on the other of caprice, of wanton ingenuity and expression. And just because of that, its originality, its integrity as poetry, resides not so much in its acts of imagination as in its forms, colours, patterns, textures: and depends not so much on the idea, as on something in the moment and manner of its embodiment.

Now it is not till this distinction of a possible secondary or subsequent originality, so to speak, in poetry is reached that Drummond's achievement is to be rightly known. You will find in his more ephemeral verse some indifferent frolicking with language; and in epigram, satire, and complimentary piece much that is pedestrian. In the Madrigal he gives himself almost wholly, yet with two great exceptions, to a nice verbal daintiness and experiment. There, and in these, his trifles, he is, if you like, artificer. But in the sonnets—never. For those he must have known some not restless but impassioned hours, and there is no dalliance there. His culture, his refinement, the choiceness of his natural vein, his scrupulous rejection of alien analogies, his keen sense of proportion and adjustment, his gifts of melody—these have strained out and away impure extraneous matter, producing in their highest faculty of symmetry an almost perfect example of the accommodating of inspiration to actual given conditions of composition. Something still in the wont and use of a familiar imagery is to be

traced to models, to Petrarch, Tasso and Marino or to the nearer poets of the *Pleiad*. But his true originality begins as their thoughts take form and order from his mind, take from him delicacy and a uniform sentiment, a colour, too, and blend of language outside the possibilities of more restrained French or Italian. The vital question, the only question that *is* criticism, must be how, not how much, has he borrowed; how has he made it his own; how wrought it together with his own art; how steeped it in his own qualities and graces?

For instance, a number of the sonnets refer to the loss of his first bethrothed, Miss Cunningham, and speak or sing in terms of a spiritual and elegiac pensiveness of which he thus came to know the secret. And they are pre-eminent in unity of form and feeling over those that express more abstract or less personal moods. Read his "What doth it serve to see Sun's burning face," and then the "Las que me sert de voir ces belles pleines" of Desportes, and note that there is initial verbal resemblance but no further imaginative affinity at all. Or study the "Dear chorister who from these shadows sends," to feel beyond the silken texture, the delicate grace of workmanship, the rightness, fitness, and completeness of the form, beyond these—the tender agitation, real then, real now, of the actual lover finding a bird's song at once mysteriously sad, mysteriously fervent. Sonnets such as these, with the "Sad Queen of Silence," and above all the perfect "Sleep, Silence child," are of that order of poetry that undertakes to replace an actual beauty

of the earth that must be broken by one that shall not easily be worn out. Passion is ordered with a strange decorum, is mindful of the pieties and politeness of old art, accepts and is obedient to appointed rules of courtesy, yet is itself. So that when he leaves the narrow limits of the sonnet for the ampler ode as in that salutation of his century to morning, "Phoebus Arise," which for two generations has stood in the forefront of the "Golden Treasury," he passes, as our living poet among women* has written "out of the gates of the garden of stanzas and walks (not astray) in that further freedom where all is interior law."

Quietist of the Renaissance, into the untroubled waters of whose soul the devotional thought of his age sank deep, yet with a "sweet calmness" (Milton's nephew gives the words), there to undergo a change, a spiritual process that is his real claim to originality, and behind whom, if only far behind, is always the figure finally of Plato—he did not so much bring his art of song and sonnet into existence with himself, as inherit it and then carry it on and perfect it by a number of grateful and loyal yet distinct retouchings. But in its secret of perpetual indebtedness and no less perpetual initiative he made it secure, and with double immunity. And like Pater's Raphael, type of the scholar artist of the entire Renaissance, may be fancied to have said, "I, too, am utterly purposed that I will not offend."

* Mrs Meynell in "The Flower of the Mind."

JAMES THOMSON BY PROFESSOR G. GREGORY SMITH

JAMES THOMSON ☙ BY PROFESSOR G. GREGORY SMITH

DR JOHNSON found it hard, even with the aid of Bozzy, to collect information of the early career of the author of the *Seasons*. A few facts have been added in recent years, and one or two of the Doctor's statements have been revised. It is, for example, now settled, to the honour of Scotland and the Muses, that the poet's boots were *not* in sad disrepair when he reached London.

Thomson's coming to Edinburgh College, in 1715, appears to have been unhappy. He had ridden forty-five miles from Ednam Manse, mounted behind his father's man; but he was no sooner left by his charge than he tramped homewards, and arrived at his father's door before the horse brought back the servant from his shopping and revels in the capital. The truant maintained that he could study to more profit in the country. It may have been that painful struggles with Latin prose at Jedburgh school had unnerved him for the work of the college class-rooms, and that he had already acquired that indolent habit which had an important influence, good as well as bad, on his later life. He had, of course, to return, and to make the best of his exile as an Arts student. A few months later his father died, a victim of "diabolical malignity," during pastoral efforts to lay a ghost in his parish; and soon thereafter his mother wound up the family affairs, and removed to Edinburgh.

Thomson pursued his Arts course for four years,

and then entered the Divinity Hall. He did not graduate, for in those days collegians, even the best, had no magisterial ambition. Academic duty, as the strenuous modern understands it, was not severe; one man was as good, and as happy, as his neighbour. Many youths who afterwards made their mark had, through no fault of their own, and to no hurt to themselves, undistinguished careers at college. Thomson read his Spenser and Shakespeare without fear of examination.

Of his course in the Divinity Hall, which he entered in 1719, the record is not quite so bare. He appears to have enjoyed the slender emoluments of a bursary in the gift of the Presbytery of Jedburgh, and to have taken part in sundry oratorical 'exercises' in the classes. A tale of the year 1724 is of special interest. Thomson had delivered a 'discourse' on a portion of the 119th Psalm before Professor Hamilton and the Divinity class. It was much to the liking of his fellow-students, but Hamilton condemned the style. Its language was, in Johnson's phrase, "too poetically splendid": the collegian, like the later poet, had buried himself "in a cloud of words." The rebuke brought home to Thomson how ill-suited he was for the prose of a country kirk. We may guess too shrewdly at the motives which induced him to leave college soon after this and to sail for London (February 1725). There are, however, some interesting facts recoverable from his life in Edinburgh which made his decision inevitable.


JAMES THOMSON

The *Seasons*, at least, was inevitable. Before his schooldays at Jedburgh, Thomson had been the pet of a Robert Riccaltoun, farmer at Earlshaugh, and afterwards minister of Southdean. That worthy had written verses on Winter, which, as we learn later, stirred the boy's imagination. The influence was lasting. If the formal round of humanities and philosophies at college served ill his poetic ambition, there was solace in the companionship of a few classfellows who found an outlet for their good spirits and bad rhymes in the Grotesque Club and the Athenian Society. Literature was not the chief concern of the former of these, a junior club of the roistering 'Ugly,' or 'Hell-fire' type, familiar to Allan Ramsay's Edinburgh; and there the country lad may have lost something of his fault of "dulness," and acquired the Addisonian fondness for claret which has interested his biographers. The Athenian Society, on the other hand, with Hamilton of Bangour, and David Malloch (not yet Mallet) as leading members, affected poetry, and did not blush to print. Their first venture, the *Edinburgh Miscellany*, appeared in 1718. A second issue, in 1720, contained three pieces, "by a student in the University" who signed himself "T.," entitled, "Of a Country Life," "Upon Happiness," and "Verses on Receiving a Flower from his Mistress." The second is of low power; so too is the third, but its didactic bias—in a vision from a hill of contemplation, which might well be Arthur's Seat—has the interest of anticipating that habit in the *Sea-*

sons which gave the greater poem its hold upon contemporary taste.

In the verses on "Country Life," the young author announces—

> "I hate the clamours of the smoky towns,
> But much admire the bliss of rural clowns,"

and the humming of the "painful bees," and the "purling rill," and "the unwearied chirping of the drill," and other sounds which later helped the poet to the drowsy harmonies of the *Castle of Indolence.* He concludes, in the same spirit of protest—

> "But grant, ye Powers, that it may be my lot
> To live in peace, from noisy towns remote"

—a very proper petition for a pioneer Nature-poet, or for a country lad imprisoned in a smoky town (*alias* Auld Reekie), but not easy of reconciliation with a coming plunge for good into the literary life of London.

The main interest of this poem is its connexion with the 'design' which sent him south. A recent biographer has surmised that this 'design,' to which Thomson refers darkly in a letter to his friend Cranstoun, was to become a Presbyterian minister in London, and to find acceptance there for the "florid eloquence" which the Hamiltons of the North despised. This is unlikely, in the light of the correspondence with Cranstoun. His friend had chidden him for neglecting the Muses. "What," retorted Thomson, 'can you expect from the Divinity Hall or a Tipenny Cell?" He had begun to find his young clerical friends

dull, and their cheap entertainment a bore. Like many a greater poet, he had no doubt as to his 'call'; unlike many a beginner he had his subject well in hand, and was not to be turned aside. His 'design' was to fly—in imagination, if not in the flesh—from "noisy towns," and to win the English public, not a London congregation. The poem in the *Edinburgh Miscellany* shows his devotion to the plan which Riccaltoun had inspired; for it gives a sketch of the Seasons and treats of Winter at greatest length. There is perhaps something symptomatic in the young poet's giving to Winter four times as much space as to Summer or Spring, and eight times as much as to Autumn, the subject which attracted him last of all when he came to write his *chef-d'œuvre*. It is enough to note that Winter had "come to rule" his poetic design, and to remember that the first instalment of the larger poem appeared within a year of his departure from Edinburgh. Something of his poetic consciousness, as well as of his constitutional liking for Nature subjects, is disclosed in the series of 'Juvenilia' printed in the collected works; and something, too, of the artist's fastidiousness, in the story of the boy's annual destruction of these efforts. Unfortunately, his memory was too good; and he was tempted in later years to write them out again for the entertainment of the curious Lord George Graham.

There have been many misconceptions of Thomson and his work: distorted gossip passed on by Dr Johnson; errors in interpretation, not always so a

musing as the good lady's, reported by Savage, that it was easy to gather from the works that the poet was "a great lover, a great swimmer, and rigorously abstinent"; errors in text-books and class-rooms as to why the *Seasons* fared so well with the eighteenth century classicists, and so badly with the Wordsworthians. The poet's seeming inconsistencies disturb the critic who would rapidly sum up his character and purpose—this laziest of men dying of the effects of exercise, this untidy person fretting if a hair of his wig were ruffled, this hater of towns choosing to spend his days with the crowd. We may leave these difficulties to take care of themselves, but we must not overlook the persistence of his early ideal; if we do, we shall be out in our estimate. The well-worn story of his reply to a friend who, finding him in bed, asked him why he did not get up, "Man, I have no motive," may prove a dangerous guide to the over-ready critic. Thomson had a motive, and the interest of his 'undergraduate' career is that it helps us to understand what it was.

DAVID HUME BY PROFESSOR
A. SETH PRINGLE PATTISON

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THE name of David Hume is surely one of the most famous which our University counts upon her student roll. But "Undergraduate" seems almost too dignified a term for the little lad of eleven years and ten months who entered the Greek class on the 27th of February 1723. For the matter of that, University is perhaps a title too lofty in its associations for the institution he was entering. "Our college education in Scotland," he writes some twelve years later, "extending little further than the languages, ends commonly when we are about fourteen or fifteen years of age." In Edinburgh the system of Regents teaching in rotation every subject in the Arts curriculum had only recently (in 1708) given place to distinct professorships. William Scott, the Professor of Greek, whose class Hume is recorded as entering, had himself been one of the Regents for thirteen years before he was told off to the teaching of Greek; and the Chairs of Logic, Moral Philosophy, and Natural Philosophy were similarly filled.

We have little light upon Hume's early years. His sketch of his own life written during his last illness is concise and self-contained to a degree that contrasts strangely with the exuberant expansiveness of modern reminiscences. Born within the Tron Parish, David was the second son of a small Berwickshire laird, and he refers with a touch of Scottish pride to his ancestry. His father was a member of the Faculty of Advocates, and according to his son's testimony "passed

for a man of parts"; but he died soon after the future philosopher's birth, and Hume, with his elder brother and a sister, was brought up by his mother, "a woman of singular merit, who, though young and handsome, devoted herself entirely to the rearing and educating of her children." This was at Ninewells, the family property on the Whitadder, near Chirnside.

Apart from his own statement that from his "earliest infancy" he "found always a strong inclination to books and letters," the only record of these early days is a saying of his mother's which has exercised the biographer not a little. "Oor Davie's a fine gude-natured crater," she is reported to have said, "but uncommon wake-minded." An eminent English psychologist, not versed in the Scots idiom, recently cited Hume on the strength of this utterance as an instance of precocious genius, supposing apparently in an innocent *à priori* fashion, that "wake-minded" in such a reference must mean mentally wide-awake. To those who know the language better it seems a hard saying, as applied to one of the clearest and subtlest intellects the world has seen. Professor Huxley throws out the suggestion that the anecdote may refer to a later period, when David's "devotion to philosophy and poverty," in preference to either law or business, may have so impressed "a shrewd Scotch wife." Professor Calderwood would connect it with the "obstinate questionings" of a metaphysical child, questions "such as would never cross the lips of John or of his sister," and which to a practical temperament may of-

ten have seemed an outrage on common-sense. Professor Orr, while keeping to the theory of the metaphysical child, is of opinion that Hume "would keep his thoughts to himself, and content himself with turning on company that good-natured but somewhat vacant expression which in manhood was noted as a feature of his appearance." A more authentic light is shed on the cryptic utterance by the language used of Hume by some of his best friends after he had established a European reputation. "He had the greatest simplicity of mind and manners with the utmost facility and benevolence of temper of any man I ever knew," says Carlyle of Inveresk; "his conversation was truly irresistible, for while it was enlightened, it was naïve almost to puerility." And he tells of another friend who, at their social gatherings, "played delightfully on the unbounded curiosity and dupish simplicity of David Hume." Principal Robertson used frequently to say that in Mr Hume's gaiety there was something which approached to *infantine*. If there was something infantine in the simplicity of Hume, the grown man and famous author, similar traits in the child would sufficiently explain a casual saying which, if it be indeed authentic, has been forced into undue prominence by the complete dearth of other information.

Beyond the date of his entrance there is no record of Hume's undergraduate career. He tells us simply that he "passed through the ordinary course of education with success," and we may assume from his

statement previously quoted that he left the University about the age of fifteen. "I was after that," he says, "left to my own choice in my reading, and found it incline me almost equally to books of reasoning and philosophy, and to poetry and the polite authors." It was these years in the library at Ninewells, and not his too early studies in the University of Edinburgh, which were the real seed-time of Hume's mind. Upon examination of the philosophers and critics, "I found," he says, "a certain boldness of temper growing in me, which was not inclined to submit to any authority in these subjects, but led me to seek out some new medium by which truth might be established. After much study and reflection on this, there seemed to be opened up to me a new scene of thought, which transported me beyond measure, and made me, with an ardour natural to young men, throw up every other business or pleasure to apply entirely to it. The law, which was the business I designed to follow, appeared nauseous to me, and I could think of no other way of pushing my fortune in the world, but that of a scholar and a philosopher." At eighteen, therefore, Hume had found himself, and the plan of his life lay clearly before him. It is this "boldness of temper" which makes his writings the turning-point of European thought.

Fifteen years later, after he had published the "Treatise of Human Nature," he sought to return to his Alma Mater as Professor of Moral Philosophy; but the Town Council, after delaying the election a

month in order "to take the ministers' avisamentum" on the subject, appointed William Cleghorn, who had been acting as deputy for the previous holder of the Chair. Hume is thus not only a famous undergraduate of our University, but also one of the many celebrated "professors who might have been"—a series which is perhaps worthy of the attention of an enterprising editor.

PRINCIPAL ROBERTSON BY
PROFESSOR P. HUME BROWN

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AS student, and afterwards Principal, of our University, Dr William Robertson may fairly claim a place in the list of its famous undergraduates. His name is now somewhat lustreless compared with those of David Hume and Adam Smith, but in his own day his fame was little less resounding than theirs. His successive historical writings were read and superlatively applauded, not only in Scotland, but in England and the leading Continental countries. From far Russia the Empress Catherine sent him a gold enamelled snuff-box, richly set with diamonds, in "admiring gratitude" for the pleasure and instruction she had derived from his Histories.

Born in the manse of Borthwick, Midlothian, in 1721, Robertson received the elements of his education under an excellent master at Dalkeith, and in his thirteenth year entered the University of which he was subsequently to be the distinguished chief. He was a strenuous student from his earliest youth. On his common-place books, dating from his fourteenth year, is inserted the motto: "Vita sine literis mors est," and the motto expresses the ruling motive and and ambition of his life. "The love of literary fame," Hume wrote in his fragment of an Autobiography, "has been my ruling passion," and in no less degree was that desire the ruling passion of Robertson's life, minister of the Gospel though he was. To one of his professors (Dr Stevenson, Professor of Logic) Robert-

son acknowledged his special debt. "To Stevenson's prelections," writes Dugald Stewart, "Robertson has been heard to say that he considered himself as more deeply indebted than to any other circumstance in his academical studies."

In his first ministerial charge, that of Gladsmuir in East Lothian, to which he was appointed in 1743, Robertson assiduously continued his studies, and in 1759 appeared his "History of Scotland," which laid the foundation of his fame. Few historical works—few books, indeed, of any kind—have been received with such general acclamation. "Upon my word," wrote Garrick to the fortunate author, "I was never more entertained in my life, and though I read it aloud to Mrs Garrick and a friend, I finished the first three books at a sitting." Mrs Garrick, indeed, was so enchanted that she made up her mind to visit Scotland "as soon as her husband's affairs would permit." The finical Horace Walpole was equally exuberant in his praise. "Your perspicuity," he wrote, "is most beautiful, your relations always interesting, never languid. . . . In short, sir, I don't know where or what history is written with more excellence. But, sir, I will not wound your bashfulness with more encomiums; yet the public will force you to hear them."

About the date of the publication of his history, Robertson was presented to Greyfriars Church, Edinburgh, of which he remained joint-pastor till his death. Honours now fell thick upon him. Within four years he was successively appointed Chaplain of Stirling

Castle, one of His Majesty's Chaplains, Principal of the University, and Historiographer-Royal for Scotland. As leader of the moderate party in the Church, he displayed a tact and eloquence in debate, which convinced his contemporaries that he was no less great as a man of affairs than as a historian. A leader in society, in the Church, and in letters, Robertson, not only in the eyes of his countrymen, but in the eyes of educated Europe, was one of the shining lights of Scotland, of whom she might well be proud. His subsequent publications—his "History of Charles V." (for the copyright of which he received £4,500), and his "History of America," crowned his reputation as a historian of the first order, and rival historians, such as Hume and Gibbon, were most emphatic in their commendation.

Lord Cockburn, in his "Memorials of His Time," gives a pleasing picture of Robertson in his declining years. "Principal Robertson and his family," he says, "were very intimate with the family of my father. The Principal dined in our house very often, and lived for the last two years of his life very near us, in the house of Grange, where he died in 1793. Many a happy summer day had his grandson John Russell and I in that house. The Doctor used to assist us in devising schemes to prevent the escape of our rabbits, and sometimes, but this was rarely, and with strict injunctions to us to observe that moderation which Mrs Robertson could never make himself practise, he permitted us to have a pull at his favourite cherry tree. He

was a pleasant-looking old man, with an eye of great vivacity and intelligence, a large projecting chin, a small heavy trumpet fastened by a black ribbon to a button-hole of his coat, and a rather large wig, powdered and curled. He struck us boys, even from the side-table, as being evidently fond of a good dinner, at which he sat, with his chin near his plate, intent upon the real business of the occasion. This appearance, however, must have been produced partly by his deafness, because, when his eye told him that there was something interesting, it was delightful to observe the animation with which he instantly applied his trumpet, when, having caught the scent, he followed it up and was leader of the pack."

OLIVER GOLDSMITH

BY OLIPHANT SMEATON, M.A

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THE fact that one of the most lovable, if also in some respects one of the most luckless, English men of letters spent some time in Edinburgh studying Medicine throws additional lustre over that faculty in our University, which has derived honour from the circumstance that more than one distinguished literary man, in addition to Pitcairne, Armstrong, Akenside, and Abercrombie, studied at its Medical School or took its medical degree.

I do not intend to deal biographically with the career of Goldsmith either before or after his residence in Edinburgh. In the first place space will not permit, in the second biographies are "caviare to the general," unless one has a free hand as to length of the monograph. Suffice to say, as regards his education, that neither at school—at Elphin, at Athlone, and Edgeworthstown—nor at Trinity College, Dublin, did he distinguish himself, the only tradition bearing on this point being that threadbare one detailed by Boswell, that he used to write songs for the Dublin street ballad singers, and steal out of College o' nights to hear them sung. He succeeded, however, more by luck than by labour in obtaining his degree, and then followed a period of ten years during which he made successive attempts to establish himself as a clergyman, as a tutor, as a barrister, as a physician, and as a man of letters. During his epoch of vagabondage, when, as he says, he "wandered hither and

thither up and down Europe, and throughout Great Britain and Ireland," he settled for a season in Edinburgh.

He appears to have arrived in the northern metropolis in October 1752, and at the very outset manifested an utter incapacity for exercising the commonest principles of prudence. On his arrival he set out to view the town, and after wandering about for some hours thought of returning home, only to discover that he had forgotten to ask the name of his landlady with whom his trunk had been left. His dilemma might have had a serious ending, but his good fortune led him to wander up near the "Cross," which stood in the High Street a few yards from St Giles', and there he met the "caddie," or messenger, who had carried his trunk for him, and who recalled the fact that the trunk was left in College Wynd, in which thoroughfare Oliver seems to have remained practically all his stay in Edinburgh. Not, however, at the same lodging-house. As Washington Irving says, the hostess was too adroit at that hocus-pocus of the table which so often is practised in cheap boarding establishments. No one could more skilfully conjure a single joint through a great variety of forms. Goldsmith gives a graphic account of the mutations in the culinary art through which in a week a single loin of mutton passed: "A brandered chop was served up one day, a fried steak another, collops with mutton sauce a third, and so on until the fleshy parts were quite consumed, when finally a dish of broth was

manufactured from the bones on the seventh day, and the landlady rested from her labours." For a time her shifts and expedients amused him, but soon he met with some fellow-students from Ireland, with whom he went to lodge on the opposite side of the wynd.

He appears to have plunged into all the convivial customs and habits of the Edinburgh of that bibulous epoch, when tavern life was the only life for men, owing to the dwelling-houses being so inconveniently small. Yet he attended the medical lectures, and his name is still to be seen on the academic matriculation register. He also joined the "Medical Society," but seems to have won for himself the reputation of a *bon vivant* rather than of a student.

He, however, obtained a lucrative appointment while here. The Duke of Hamilton—that Duke James who afterwards married one of the beautiful Gunnings—had conceived a great opinion of the young Milesian's scholarship, because he held the degree of Trinity College, Dublin. The Duke therefore engaged him as a tutor.

In connection with this appointment Goldsmith's love of fine clothes comes out, and a curious memorial is still extant. The late David Laing was one day tearing up for waste paper an old ledger which he had purchased in a lot with other books. Suddenly his eye caught something. It was an account for the year 1753 between "Mr Oliver Goldsmith and Mr James Filby, Tailor, Edinburgh."

EDINBURGH STUDENTS

Says Wilson in his "Reminiscences," "The fragment of the Edinburgh tailor's ledger thus snatched from oblivion illustrates the marvellous change since that olden time when a medical student's wardrobe shone resplendent in 'sky-blue satin, rich black Genoa velvet, fine sky-blue shalloon, and the best superfine high claret-coloured coat, with a superfine small hat, on which was 8s. worth of silver hat lace.'" The first bill was paid "by cash in full," the second was "carried over to folio 424," which, alas, has long ago gone the way of all old ledgers.

Oliver also enjoyed himself in another way, and here we shall allow him to speak for himself. He seems to have obtained the *entrée* to the assemblies then held in "Old Assembly Close," and presided over by the famous Miss Nicky Murray as "Directress-in-Chief." These assemblies appear to have been very solemn functions in which amusement had no part, the proceedings being conducted with much of the lugubrious solemnity of an execution. In a letter to his friend, Robert Bryant, at Ballymahon, Ireland, and dated 26th September 1753, he writes: "The men here have generally high cheek bones, and are lean and swarthy, fond of action, dancing in particular. Now that I have mentioned 'dancing,' let me mention something of their balls, which are very frequent here. When a stranger enters the dancing-hall, he sees one end of the room taken up by the ladies, who sit dismally in a group by themselves; in the other end stand their pensive partners that are

to be, but no more intercourse between the sexes than there is between two countries at war. The ladies, indeed, may ogle, and the gentlemen sigh, but an embargo is laid on any closer commerce. At length, to interrupt hostilities, the lady directress, or intendant, or what you will, pitches on a lady and gentleman to walk a minuet, which they perform with a formality that approaches despondence. After five or six couples have thus walked the gauntlet, all stand up for country dances, each gentleman furnished with a partner by the aforesaid lady directress. So they dance much, say nothing, and thus concludes our assembly. . . . Now I am come to the ladies, and to show that I love Scotland, and everything that belongs to so charming a country, I insist on it, and will give him leave to break my head who denies it, that the Scotch ladies are ten thousand times finer and handsomer than the Irish."

After studying for two years at Edinburgh Medical School, his professors being Charles Alston (Medicine and Botany), Robert Whytt (Practice of Physic), Alexander Monro, *primus* (Anatomy), John Innes (Chemistry), Robert Smith (Midwifery), Goldsmith went to Leyden in the year 1754, where he completed his medical course by taking the degree. Though he never returned to Edinburgh, he always loved the place and the people, and more than once took off the edge of the sarcasms of the great Jupiter Olympus of literary criticism, Dr Samuel Johnson, by interjecting a witty rejoinder in the

midst of the flow of Johnsonian acerbity against the Scots. Goldsmith was a man who, had he given himself a chance, might have achieved even greater fame than fell to his lot. But he was always one who lived from hand to mouth, and his maxim ever was, "Sufficient for the day is the evil thereof." To-morrow, to him, was too distant a factor to come within the horizon of his calculations. So he lived, and so he died, and his best eulogium is that uttered by Samuel Johnson—"Was ever man of letters so loved and so trusted?"

JAMES BOSWELL  BY SIR
WILLIAM ROBERTSON NICOLL

JAMES BOSWELL BY SIR WILLIAM ROBERTSON NICOLL

THE character of Boswell I do not propose to discuss. Most of the materials for an estimate will be found in the "Letters of Boswell to the Rev. W. J. Temple," published in 1857. These have not been reprinted, and it was a mere accident that saved them for us. The son-in-law of Temple, who had settled in France, kept them in a parcel of waste-paper at Boulogne, where they turned up. A valuable supplement is Dr Roger's edition of Boswell's "Commonplace Book," with a biography. The main point to remember in judging Boswell is that he was undoubtedly partly insane. Insanity was well marked in the family. This is ordinarily a too facile method for accounting for peculiarities, but in this case it is sound.

My object is to say something about Boswell as a writer. To form an estimate of his real abilities it will be better meanwhile to pass over his immortal biography of Johnson. It may be said with truth that Boswell had acquired for this *magnum opus* an unrivalled collection of materials. He manages with infinite skill to put into it not only the great character and pithy sayings of Johnson, but practically all the best things he had heard and seen during his life. His own view of the book is shown in the title. The concluding part is, "The whole exhibiting a view of literature and literary men in Great Britain for more than half a century during which he flourished." This is quite accurate. The biography of Johnson is a great

deal more than a biography of Johnson.

We can test him better by a reference to his volume on Corsica. The title runs in the first edition: "An Account of Corsica, the Journal of a Tour to that Island, the Memoirs of Pascal Paoli, by James Boswell, Esq." The interesting part is the tour to Corsica, and Boswell's secret is clear from the first.

To begin with, he selects interesting circumstances and starts at once. Here is the first sentence: "Having resolved to pass some years abroad for my instruction and entertainment, I conceived a design of visiting the island of Corsica." What could be better? Then there is another sentence, and we come to this, "When I got into Switzerland I went to see M. Rosseau." Admirable again. A lesser writer would have described in tedious detail the journey to Switzerland, but Boswell sets us at once on the magic carpet. We are in Switzerland, and at that time there was but one man in Switzerland. At the present time there are mountains, but they did not exist then—at least, the faculty of observing them did not exist, and it comes to the same thing. So Boswell at once, with unerring instinct, fixes on Rosseau. And without further parley he gives us a letter from Rosseau. What more could an up-to-date editor wish for? "A hitherto unpublished letter from Rosseau." In another page or so we are in Corsica.

This seems all very simple, but it is, as experience proves, the most difficult thing in the world. Take up even now the first magazine that lies to your hand,

and read a short story. Almost invariably the first paragraph is superfluous. The writer, instead of moving from point to point of interest till he comes to a climax, scatters himself, deviates, becomes tedious. I knew a Scotch minister who in his old age made a journey to Palestine. He announced a series of lectures on the subject. The first carried his hearers as far as Newcastle. This is an extreme case, but the blunder is committed on a smaller scale by almost every one. Boswell never made it. He knows how to select the points of true salience, to state them, and then pass on.

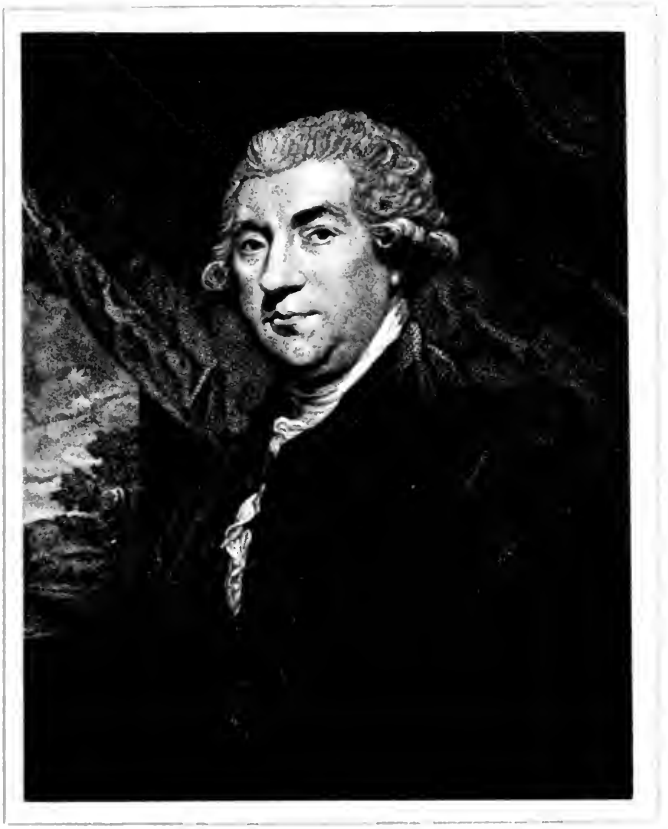
Were I asked to select the most admirable piece of homely description in the English language I should take this inimitable account of Boswell's night at Slains Castle: "I had a most elegant room; but there was a fire in it which blazed; and the sea to which my windows looked roared; and the pillows were made of the feathers of some sea-fowl which had to me a disagreeable smell; so that by all these causes I was kept awake a good while. I saw in imagination Lord Errol's father. Lord Kilmarnock (who was beheaded on Tower Hill in 1746), and I was somewhat dreary. But the thought did not last long, and I fell asleep."

My favourite passage in the whole biography is of course this: "In 1776, Johnson wrote, so far as I can discover, nothing for the public; but that his mind was still ardent and fraught with generous wishes to attain to still higher degrees of literary excellence, is proved by his private notes of this year, which I shall

insert in their proper place." The references to Ogden's sermons run this very hard. Thus Boswell had the power of selection. He buttonholed his readers at the beginning. He detained them until he had finished—or at least he detained them so long as he was describing the results of his own observation. His reflections are often very wise and sometimes very foolish, but they have the inestimable merit of being always his own, and therefore always interesting.

It is still a moot question whether he succeeded in understanding Goldsmith. It must be admitted that the general impression among Goldsmith's contemporaries was that he failed in conversation, and was often ludicrously inept. But against this is the evidence of his reported sayings, which will be found admirably pieced together by Washington Irving in his life of Goldsmith. The catena is longer and more luminous than most people think. Besides, the conjecture may be hazarded that Goldsmith as a humorist was in advance of his time. He was the new humorist of that age. It was a society in which Sydney Smith's jokes would have been considered silly. And Goldsmith had something of Sydney Smith's quality—finer and rarer. But that Boswell soundly estimated the great majority of his personages may be taken as certain. His portrait of Johnson stands alone.

It is not too much to say that without Boswell we should have known Johnson's personality only through Mrs Thrale's anecdotes. No other contemporary record is vital. Mme. D'Arblay has, perhaps,



been over-estimated of late. Croker's criticisms in the *Quarterly Review* have a very large admixture of truth. Boswell has given us his own great delineation, and he has also shown us how to correct Mrs Thrale. It seems ungracious to say that there is room for a new edition of Boswell's life, but it is true. In spite of Macaulay's criticisms Croker's notes contain much valuable matter. The edition of Napier is unpretending and useful. There is good material in Percy Fitzgerald's edition. Dr Birkbeck Hill's work is by far the best, but it is not up to the present standard of editing. Dr Birkbeck Hill advanced very much in his own lifetime. His posthumous edition of the "Lives of the Poets" is a far better book than his edition of Boswell. Robert Carruthers in his notes on the "Journey to the Hebrides" did most useful service in collecting the Highland traditions still floating. But we have no edition of Boswell quite on a level with the best performances of modern scholars.

It should be noted that Boswell had a remarkable memory. He did not trust to that memory, for he was an assiduous note-taker, and we have the results of the unparalleled combination of Boswell as a writer and Johnson as a speaker. Something more was required, however, than the power of reporting. One must write a biography before he discovers the extraordinary powers of missing and forgetting lodged in the human mind. You write to a man who has known your subject for years, who has had the most confidential communion with him, who has shared

his heart's secrets, and he replies that beyond the general impression of kindness and affection he can tell you nothing. And another, who has perhaps seen the same man but once or twice, can draw a picture with all the force of an etching. You may take a clever man, put him in the most intellectual circles in London, drench him with the best talk for a whole generation, and at the end of it he will write a book of memories without a single contribution to our knowledge of the people he talks about. A quiet observer (and the people who see never show that they are seeing) takes it all in and will bequeath you a series of portraits you cannot afford to miss.

But there is a third quality common to both, and indispensable to the higher style of narrative. It is relish, gusto, a hearty smack. This carries the reader on with an irresistible tide. I quote from Boswell's "Tour to Corsica." "I employed myself several hours in rowing, which gave me good spirits. I relished fully my approach to the island, which had acquired an unusual grandeur in my imagination. As long as I can remember anything, I have heard of 'the malcontents of Corsica with Paoli at their head.' It was a curious thought that I was just going to see them." You perceive here the excellent faith that it is worth while to travel, that every place is full of things curious and entertaining.

After all, the only bits of biography that will survive are the Boswellic passages. All the rest goes—the letters, the philosophy, the criticism, the ponder-

ous parts of life. A few characteristic incidents, a few saline sayings—these, and these only, live. About Oliver Goldsmith we remember the scarlet breeches, the plum-coloured waistcoat; about Emily Brontë the heroic self-branding; about Sydney Smith the wooden pavement of canons' heads round St Paul's.

SIR WALTER SCOTT

BY PROFESSOR SAINTSBURY

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IT would perhaps have been wiser, when the Editor of the *Student* asked me to write on the above subject, to decline brick-making where there is so little straw—in fact where there is not much clay. Of hardly any part of Scott's life have we fewer details, direct or indirect. The "Autobiographical Fragment," and Lockhart's comments on it, supply almost the whole—"Redgauntlet" and its preface, and the general preface to the Novels, all of which elsewhere supplement agreeably and usefully, giving little or nothing here. The "Familiar Letters" do not begin till long afterwards, and the remarks of outsiders are scanty and unimportant. I think I saw a few new ones a year or two ago, but I have not the reference at hand; and I remember that they were of little pith or moment. And the British Museum Catalogue is as far away in space as the rummaging of Edinburgh libraries is impossible in time.

We do know, however, that the University has neither much to pride, nor much to blame itself for, in connection with the great man who was born almost under its walls. Scott attended a few classes—Humanity, Greek, Philosophy, History, and Civil and Municipal Law. But his course (if it can be called so, for the curriculum was loose enough then) was interrupted by one of the very serious illnesses which attacked him during his youth, to return more seriously still in age. And, by his own account, he did not work very hard or take things very gravely. One point

about the disgrace into which he got with the Professor of Greek (Dalzell) has not, I think, been noticed. It was for writing an essay on "Homer and Ariosto," and preferring the Italian. Now it was very silly of Professor Dalzell to be "wroth" and call Scott a "dunce": because this kind of kicking over the traces, though by no means a proof of wisdom, is also by no means a proof of folly, but only of youth. It is to be remembered that Scott was a mere boy, barely over twelve, when he entered in November 1783, and probably not fourteen when he wrote the essay. Also, there is a great deal to be said for Ariosto. But the unnoticed point is that, in doing this, Scott had come under a specific and definite taboo. For the great Blair had for twenty years been laying it down, literally *ex cathedra*, and had just printed the dictum, that any one who said he would as soon read tales of chivalry as Homer was the very exemplar of a dull and tasteless person. So Scott picked up the glove directly, and (I should imagine) of malice prepense.

But if he neither did nor could attend many classes —if he did not very diligently perform the work of those which he did attend—we know that he frequented the "University of Books" diligently, if not regularly, enough. Even the outraged Dalzell seems to have perceived and admitted his out-of-the-way reading; he learned Italian on purpose to pursue the forbidden study of chivalry; and the few reminiscences of fellow-students almost all bear witness to his out-of-door as well as indoor addiction to print.

Moreover, he would seem to have been in actual attendance when his famous meeting with Burns took place; for Burns came to Edinburgh on 28th November 1786, and Scott, whose illness had kept him away from the University during the previous session, had now come home and become apprenticed to his father. At any rate he certainly returned to classes—Moral Philosophy and Law—in later years, and so may be reckoned as a student beween 1783 and 1788—a period which includes the Burns interview beyond all cavilling.

So then, we may take these two incidents as characteristic of his University period, if not of his University career. He gets into disgrace for preferring the Romantic literature that he did know to the Classic that he did not—for there is any amount of Romance in Homer, especially in the "Odyssey." And he sees Burns. In the one point he declares himself, however ignorantly and excessively, on the side that was to dominate the whole literature of the next two or three generations, and to redress the injustice of two or three generations past. On the other he touches, almost literally—perhaps literally—the hand from which he was to take the rekindled torch of literature specially Scots. If the University of Edinburgh can get some one to do as much, even once in a dozen or a score of quinquenniums, I think people need not grumble at her much.

MUNGO PARK, EXPLORER

BY W. S. BRUCE, LL.D.

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SCOTLAND has perhaps distinguished herself in the exploration and development of Africa more than any other nation. Its history bristles with Scottish names headed by men of world-wide repute such as Mungo Park, James Bruce, David Livingstone, and Joseph Thomson. Two of these were alumni of the University of Edinburgh namely Mungo Park and Joseph Thomson, and it is for this reason that we include in the present volume a note on the life of Mungo Park.

Mungo Park was born at his father's farm at Foulshiels near Selkirk on the 10th September 1771. He was one of a numerous family, all of whom were successful and prosperous citizens. This was no doubt in great part an inheritance of worthy parents who concentrated on the thorough and sensible education of their children.

Having received the rudiments of his education at home, Mungo Park afterwards was trained for several years at the grammar school at Selkirk. He was originally intended for the church, on account of his studious habits and serious turn of mind. But Mungo Park having chosen the medical profession for his further career, his father wisely acquiesced, and he was bound apprentice at the age of fifteen to Mr Thomas S. Anderson "a respectable surgeon in Selkirk," with whom he resided three years. During this time he continued to attend the grammar school and pursued especially classical studies. In 1789 he at-

tended at the University of Edinburgh the usual medical courses during three sessions, a rather shorter period than is now required of those who wish to qualify for medicine. We find no particular record of this period of his life, but his studies appear to have been carried on with ardour and assiduity, and he seems to have been distinguished among his fellow-students. During his vacations he paid special attention to botany with his brother-in-law, Mr James Dickson, a gardener, seedsman, and botanist of European repute; he was also one of the original founders of the Linnaeum Society and author of "Fasciculi Quatuor Plantarum Cryptogamicarum Britanniæ." At the end of his university career he travelled to London, where Dickson introduced him to Sir Joseph Banks, through whom he was appointed Assistant Surgeon to the "Worcester," an East Indiaman, in 1792. During this voyage to Sumatra he carried on important botanical and zoological researches.

At this time an "Association for promoting discoveries in the interior of Africa" had been formed, and after the death of Major Houghton there was considerable difficulty in supplying his place. Park offered himself for service; his offer was readily accepted, and he set sail on 22nd of May 1795 on board the "Endeavour," an African trader bound for the Gambia. It was largely through Sir Joseph Banks that he received the appointment. Arriving a month later at Jillifree, at the mouth of the Gambia, he proceeded to Pisania, a British Factory, 200 miles up the

river, and remained about five months with Dr Laidley learning the Mandingo language and collecting information about the countries he was to visit.

In December 1795 he left Pisania eastwards towards the Niger, and in February 1796 arrived at Jarra, and thence proceeding on his journey was taken prisoner by Ali on the 7th of March. Here he remained captive till he escaped in July, during which time he suffered a series of unexampled hardships. After wandering in great misery for about three weeks he arrived at Sego, the capital of Bambarra, a city of thirty thousand inhabitants, and attained the great object of his journey by sighting the Niger, ascertaining the extraordinary fact that its course was from west to east. After a short stay at Sego, (where he did not find it safe to remain), Park proceeded down the river about 80 miles to Silla, and reluctantly, owing to insurmountable difficulties, abandoned his design of proceeding further eastwards, and resolved to return by a different route to Gambia. On the 3rd of August 1796 he left Silla and arrived at the frontier of Bambarra on the 23rd. Here the Niger ceases to be navigable, and leaving the river he travelled for several weeks through a mountainous and difficult country and reached Kamalia on the 16th of September 1796. This latter part of the journey was done on foot, his horse having been worn out and unable to go any further. For long periods he travelled alone, unarmed, and often practically naked without any resources whatsoever beyond his per-

sonal wisdom and persuasiveness. During this time he encountered terrible hardships with all the horrors of the rainy season, and became dangerously ill, his life being preserved by the benevolence of a negro. It is a striking feature with regard to Park that, although the Arabs cruelly persecuted him, the Negro tribes as a rule affectionately respected him. This is further emphasized by the fact that during Park's last expedition this same negro, Karfa Tanra, hearing a white man whom he thought might be Park was travelling through the country, took a six-day journey to meet him.

Having still 500 miles to traverse to the Gambia he was forced to wait patiently for seven months for the first caravan of slaves that might travel on the same track. This did not occur till April 1797, and on the 4th of June he reached the Gambia, and on the 10th arrived at Pisania after an absence of eighteen months. On the 15th he embarked on a slave ship, and after a long and circuitous voyage reached Britain on the 22nd of December. He arrived in London before daylight on Christmas Day. Being too early to go to his brother-in-law he wandered about the streets near Mr Dickson's house, and finding one of the entrances into the gardens of the British Museum accidentally left open, walked in. It happened that Mr Dickson, who had the care of those gardens, went there early that morning on some trifling business, and the two met under such extraordinary circumstances.

The African Association hailed Park's arrival with triumph. He returned to Fowlshiels, became engaged to the eldest daughter of Mr Anderson of Selkirk, and completed his manuscripts. His work was published in 1799 and received with applause on account of the vast amount of authentic and important information it contained. It was regarded as the greatest accession to the general stock of geographical knowledge which had ever been made by any single traveller, a claim which up to the present time holds its own. During the summer he married Miss Anderson, a union which bound him still more closely with the family and contributed to his future comfort and happiness. He lived for more than two years after his marriage on the farm at Fowlshiels. In 1801 he settled as a medical practitioner at Peebles, and was distinguished by his kindness to the poor.

After long negotiations he was summoned by the Colonial Office to London in September 1804. An expedition was arranged, and Mr Alexander Anderson and Mr George Scott agreed to accompany him. The expedition sailed on 30th January 1805, and seven weeks later the party took its departure from Kayee, on the Gambia, for the interior.

The great object of this journey was to pursue the course of the Niger to the utmost possible limit to which it could be traced; to establish communication and intercourse with the different nations on the banks, and so forth. Park was granted a brevet commission of captain, and Anderson a lieutenancy, and a lieu-

tenant and thirty-five men of the garrison were placed at his disposal. The inefficiency of these soldiers sounded the death knell to the expedition, coupled with the fact that Park started during the rainy season, to avoid a delay of seven months which would probably have brought censure on him from home authorities and would have occasioned additional expense.

In this difficult situation having formed his resolution to advance he adhered to it with tranquillity and firmness, and effectually concealed from his companions and his friends and correspondents in Britain any doubts and misapprehensions that he almost certainly must have had.

Park's last letters were dated November 16th, 17th, and 19th from Sansanding, and there all authentic information terminates. In his official communication to Lord Camden he sends his journal up to that date and adds:

"We had no contest whatever with the natives, nor was any one of us killed by wild animals or any other accidents; and yet I am sorry to say that of forty-four Europeans who left Gambia in perfect health, five only are at present alive, viz., three soldiers (one deranged in his mind), Lieutenant Martyn, and myself.

"From this account I am afraid that your Lordship will be apt to consider matters as in a very hopeless state; but I assure you I am far from desponding. With the assistance of one of the soldiers I have changed a large canoe into a tolerably good schooner, on board of which I this day hoisted the British flag, and

shall set sail to the East with the fixed resolution to discover the termination of the Niger or perish in the attempt. I have heard nothing that I can depend on respecting the remote course of this mighty stream; but I am more and more inclined to think that it can end no where but in the sea.

"My dear friend Mr Anderson and likewise Mr Scott are both dead; but though all the Europeans who are with me should die, and though I were myself half dead, I would still persevere; and if I could not succeed in the object of my journey, I would at last die on the Niger."

And to his wife he writes:

"I am afraid that, impressed with a woman's fears and the anxieties of a wife, you may be led to consider my situation as a great deal worse than it really is. It is true, my dear friends, Mr Anderson and George Scott have both bid adieu to the things of this world; and the greater part of the soldiers have died on the march during the rainy season; but you may believe me, I am in good health. The rains are completely over, and the healthy season has commenced, so that there is no danger of sickness; and I have still a sufficient force to protect me from any insult in sailing down the river, to the sea.

"We have already embarked all our things, and shall sail the moment I have finished this letter. I do not intend to stop or land anywhere, till we reach the coast."

In these letters the possibility of Park not return-

ing is for the first time expressed under circumstances that would have made most men return a long time previously, and his journal indicates that the death of Anderson told heavily upon him. "No event," says Mungo Park, "which took place during the journey ever threw the smallest gloom over my mind till I laid Mr Anderson in the grave. I then felt myself as if left a second time lonely and friendless amidst the wilds of Africa."

Mungo Park was tall and perfectly proportioned, active and robust, well fitted for great exertions and the endurance of great hardships. Gentle and amiable, yet withal enterprising; indefatigable, persevering, and full of calm fortitude; sound in judgment and appreciative of facts, he had all the qualities of a great explorer.

JOHN LEYDEN, POET & ORIENTALIST, BY W. S. CROCKETT

JOHN LEYDEN, POET & ORIENTALIST, BY W. S. CROCKETT

SOMEWHERE on the Gala Water Road two figures going Edinburghwards are seen to halt in the late afternoon of a quiet October day a hundred and twenty-three years ago. Both are John Leydens—father and son—and the older is saying good-bye to the younger, who is on his way to the University for his first session. What words are those which every good Scots parent addresses to his boy at that unforgettable parting of the ways—when the moment has come for the back to be turned on home and its familiar faces? "Now, see and do what's richt: and the God of Jacob defend you and keep you frae a' ill. Dinna forget to write often." Such, we may suppose, was the message that rang in Leyden's ears as he continued his journey. He was barely fifteen—a rustic of the rustics—uncouth, but kindly, countrified, yet full of a fine ambition to succeed, and surround the family name with credit. Eight years later Alma Mater was proud of him, emerging from her academic halls, the most erudite student of his day, mayhap—fully equipped and eagerly ready for that honourable place in the service of the Church to which he had been dedicated. Destiny, however, carried Leyden far beyond the confines of a parish pulpit, that once cherished goal for many a mother's son north of the Cheviots. That Leyden would have made a conscientious minister of the Word cannot be doubted. He had the requisite qualities—good health, imagination, moral earnestness, a pas-

sionate love of humanity. He was a deeply reverent soul, despite exuberances of spirit which would break out on occasion. But alas!—his voice, raucous and unpleasant, described by himself as consisting chiefly of "saw-tones," was as the fly in the ointment. That defect, notwithstanding, many who heard him conduct services—at Cavers and elsewhere, believed that most pleasant prospects lay before the amazingly clever probationer. Yet Leyden's sphere of activity was to be outwith the Kirk. He may have been soured (as was hinted) at the absence of preferment—a Patronage blunder. Whether or not, he turned his thoughts to doctoring. Though an Edinburgh student, he took the St Andrews degree in medicine. Opportunities of abounding usefulness quickly opened up, and the story of his brilliant Indian career, and so swift removal from this mortal scene, is one of History's tragic episodes.

Leyden started life amid all the humility of a cottage home. He sprang from the people—was proud to own the Henlawshiel herd his father, and Isabella Scott, his homely and winsome wife as mother. It was to the latter, indeed, like many another, that Leyden owed much of the grit and indomitableness of purpose which carried him into the all-engrossing struggle for learning that absorbed his days. Kirkton School, a few miles from Hawick, gave him a grounding in the elementals, but the ingle-nook at Henlawshiel in many ways was worth a dozen Kirktons. There, his early inspirers stood in a similar relationship to him as those

under the shadow of Sandyknowe, who did so much to "make" the future "Minstrel of the North."

Leyden's linguistic proclivities were prompted, no doubt, by the possession of *Ainsworth's Dictionary*, which "had all the Latin words, and the corresponding Greek and Hebrew." Or was it his gloating over that quaint and curious compilation by Father Ambrose Calepo, entitled *Calepini Dictionarium Octolingue*? There Hebrew and German and Italian were added to the dead old classics. It was after that prize fell to his hands, at all events, that he devoured greedily every foreign author who came his way, and long ere he entered college was so proficient in Latinity that he had mastered Cæsar and Virgil, and had read considerable portions of Horace, and Cicero, and Sallust.

Leyden's classes during his eight years at Edinburgh were as follows: In his first session, he took Junior and Senior Greek, a combination which only those who were called "Provectiores," or well-advanced, might attempt. Next year (1791-2), he took Senior Humanity, with Senior Greek again, and Logic. For his third session, Senior Greek attracted him once more, with the classes of Moral Philosophy and Physics. At his next session he entered the Divinity Hall, following the prescribed course in Hebrew, Divinity, and Church History, repeating this in 1794-5, with Senior Greek for a fourth time. In 1795-6 he studied Syriac and Arabic, together with Divinity and Church History. This ended his

theological training, though he did not proceed to licence for a year or two. In 1796-7 we find him turning his attention to Chemistry; in 1797-8 to Botany; in 1798-9 to Anatomy and Surgery; and finally in 1799-80 to Therapeutics, Materia Medica, and Midwifery—a full medical curriculum.

All through his college period this truly formidable student pursued a carefully arranged plan of work, apportioning special hours to special subjects, and allowing himself so many hours a week for general reading, in which he had wide acquaintance. During the summer vacation of 1792 he taught the "Luggie" school at Clovenfords; where one of his pupils (a hind's child) was John Lee, afterwards Principal of his own University, learned divine and bibliophile, the delightful "Archdeacon Meadow" of Hill Burton's *Book Hunter*.

Leyden's forte lay in the amassing of linguistic lore. Greek had long won his heart, and Hebrew opened up that fascinating and mystic realm of the Orient in which his supreme triumphs were gained. He shines in the front rank of Orientalists, and did more to advance the scientific treatment of the languages of Southern Asia than was attempted up to almost the middle of the nineteenth century. He could carry on a conversation, so it is said, in some twenty-eight languages or dialects spoken between India and China, and he knew at least other seventeen European languages—forty-five in all—an extraordinary record for one who ceased his life-work at six and thirty!

JOHN LEYDEN

It was in 1803 that Leyden sailed for India. There he became in turn a surgeon on the Madras Establishment of the East India Company; Professor of Hindostani in Fort William College, Calcutta; Judge of the Twenty-Four Pergunnahs (where the population was about a million); and lastly, Master of the Calcutta Mint. In 1811 his services were sought for the expedition against Java; and at Molenvliet, near Batavia, on the 28th August,

> "Quenched was his lamp of varied lore
> That loved the light of song to pour."

In the pages of Lockhart, Leyden is a lively and entertaining figure. Scott met him for the first time in the winter of 1800. That prince of bibliomaniacs, Richard Heber, was then in Edinburgh making daily additions to the most remarkable collection of books ever brought together by a single individual. At his death, 216 days were occupied in the sale of them by auction. Leyden and Heber met often at Constable's bookshop, the chief resort of the Edinburgh literati. And there Scott was introduced to his future good friend and coadjutor of the days when the *Minstrelsy* was in the making. That great work Leyden helped with all his heart and will, contributing pieces of his own, and a learned *Dissertation on Fairies* for which he gathered material in every conceivable quarter. For Scott's sake, as well as for the ballads themselves, he hunted all over the Border from Cranshaws to Cumberland, and felt—once at least—that a forty-mile tramp was none too much for such a cause.

Scottish literature owes its own debt to John Leyden. He edited (amongst other things) the *Complaynt of Scotland*, and a collection of *Scottish Descriptive Poems*, and for a time he managed the *Scots Magazine*. And if his own *Scenes of Infancy* cannot be rated in the first or second, or even in the third class, nevertheless, it is this poem which has endeared him to every Border heart, and that keeps his memory green by the banks of his native Teviot, and elsewhere in the land that he loved more than life itself. He passed with the name of the Border on his lips, and, as Hogg said, "Scotland knows her loss too late."

HENRY, LORD BROUGHAM

BY J. IAN MACPHERSON, M.P.

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IN the early years of the nineteenth century a young man of "gaunt, ungainly figure, with an ungraceful habit of action," ascended a vehicle bound for London, and, with that unbounded self-confidence which had hitherto characterised him, proclaimed to the motley crew who were his fellow-passengers: "Here goes the Lord Chancellor of England."

This was Henry Peter Brougham, who claimed, I gather, with but little justification, descent from the de Burghams, ancient lords of Brougham Castle, and from the Barons of Vaulx, but who could claim, if he cared, with much certainty direct descent from a respectable Restoration family of Northern England. No one could claim to be a more typical Edinburgh boy. He was the eldest son of Henry Brougham, and Eleanor, daughter of Mrs Syme, widow of an Alloa minister, a sister of Robertson, the great historian. There is no reason to doubt now that St Andrew's Square was his birthplace. Time and fashion have wrought their changes. The house at the corner of West Bow and the Cowgate where his father lodged and married would have annoyed his son to-day; the quiet fishing village of Cannes, where he himself died, would to-day have satisfied him. The High School ushered him as its dux to the University at fourteen years of age. There he was essentially the student as we know him, prepared to work and prepared to play. We are told that he loved mathematics

and physics, frequented the debating societies with the grave and serious air of his generation, and was as riotous as any of the back benchers of our day, "twisting off knockers as eagerly as he took part in philosophical discussions." This spirit followed him into later life. He tormented the judges on circuit in England—(though called to the Bar in Scotland he left it)—as fervently as he tormented his professors.

He indulged a philosophical and scientific bent at an age when most men are on the threshold of the syllogism. It was not so much that he had felt that he had contributions to make to modern thought to enlighten mankind. He was prepared to pour forth criticism of men who had lived their life in the realms of science and philosophy—criticism as fantastic as it was ludicrously false and gratuitous.

An ambitious youth, it was his aim to be known, and it was his desire "to outshine everybody in everything." Humanitarianism was in vogue: the abolition of slavery was a popular cry: he wanders on the Continent to make himself familiar with it. Napoleon was making the world "pale with his cannons' rattle" and changing the map of Europe: he produces a grotesque and futile brochure on the Colonial policy of European nations. What has been called "magazine literature" and pamphleteering on a large scale burst upon the world in the *Edinburgh Review* at the bidding of a distinguished coterie: he achieves the distinction of contributing three out of the twenty-nine articles in the first number, and "they may pass, for he was

young." The danger of French invasion was little more than a scare: he organises a voluntary corps in Edinburgh, and a biographer naïvely relates that the Government slighted its offer of service. A man who could do, and did, all these things, was not one to fail in his ambition; and he meant what he said when he ascended the coach that took him to London. His profession was the Bar: he lived by literature "*tenui avena*": his hopes were in politics. He was soon in the swim of Holland House, with its power, its culture, its influence and its Whiggism.

It was no small triumph for him that he turned the election of 1807 with his pen. This success in politics assured his success in the profession in which he had been struggling without much hope. He never was a great lawyer: few people could do ordinary work on circuit worse than he could: and his snobbish tactlessness annoyed Bench, Bar and solicitors. No Lord Chancellor ever had more bitter comments passed upon his qualifications. But, as often happens in his profession, cases came, not because he was a profound lawyer, but because his name had been identified with a cause or a phase of politics or of life: to him fell the *causes célèbres* of his day: they were cases that suited his ready wit, his wide range of interest and knowledge, his dramatic instinct and his fancy. For days he declaimed before both Houses of Parliament on behalf of Liverpool merchants who were petitioning against Orders in Council. This case brought him fame, fortune and favour in high

quarters. No rise was so rapid except that of Erskine. As a junior, or "stuff gownsman," he made as much as 7000 guineas a year—a princely income in days of comparatively low fees. In the all too frequent cases that affected the royal household he contrived to centre the limelight on himself. Biographers record that he exaggerated his friendship with the Princess of Wales. In any case he was her chosen adviser, and it seems pretty clear now that, but for him, the tragedy of her case would never have happened. He coveted the chance of playing the leading part in a famous scene, and he made it possible. And the peroration, which he wrote seven times and declaimed, he considered his best piece of advocacy. It stands to-day in any book of oratory. In after days this dramatic splendour which he summoned to his aid in this case he summoned again at the second reading of the Reform Bill when he was Lord Chancellor: but it was grotesquely overdone. "He ended his speech with a prayer: he fell on his knees and remained kneeling: he drank mulled port, and his friends. who thought that he was unable to rise, picked him up and set him again on the woolsack!"

Though his practice in earlier days justified his getting a "silk gown," the King would not allow him to have it. Ultimately he did get it, but his practice declined, and he sought solace and adventure in politics. His greatest achievement from the legal point of view was the institution of the Judicial Committee of the Privy Council, where he loved to sit as President.

LORD BROUGHAM

His first seat in the House of Commons was Camelford. Despite the practice of the day he, a new Member, spoke at once and frequently. He entered the House with éclat as a Whig, but he managed in a short time to get himself distrusted and he was ruthlessly thrown overboard to lighten the ship. He was returned again for Winchelsea, and soon became the real Leader of the Opposition. Ultimately he represented Knaresborough, and it was characteristic of him and quite in the spirit of the dishonest adventurer that, when, through an unsavoury action on his own part, he saw Grey forced to relinquish office, he remained on as Lord Chancellor with Melbourne. In his later days in the House of Commons he was suspect and abhorred, yet he filled column after column of Hansard, and in the often-quoted words of Macaulay, who never loved him—"mere tongue, without a party and without a character, in an unfriendly audience and with an unfriendly Press, never did half so much before." There was a touch of contempt even in his name being given to that "ancestor of all the Broughams" in which he was conveyed through London, surveying scenes of past and possible triumphs.

Long before he died quietly at Cannes, before even the Conventions of social science, to which he had, in broken spirit and in disgrace, to devote the remaining years of his life, he revelled in follies and extravagances in the midst of signal honours. He was made Lord Rector of Glasgow University; and ultimately Chancellor of Edinburgh University. On his

way to Glasgow, at a banquet given in his honour at Edinburgh, he succeeded in reaching the height of egregious folly and stupidity. When Lord Chancellor, he went to Scotland and took the Great Seal with him, and the childish incidents in connection with this, as well as the anger of the King, have recently been retold in the public prints in connection with a foreign visit of another and more distinguished Edinburgh Lord Chancellor. When a provincial Government in France summoned a National Assembly it was only the realisation that he would lose English citizenship and emoluments that checked his inordinate desire to be a French Deputy! And if it be true, as it very likely is, that he caused a false report of his death to be circulated, it was but a last attempt of a restless and unhappy soul to see itself again, in the public eye, before it flickered out.

SIR DAVID BREWSTER

BY A. P. LAURIE, D.Sc.

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THERE are surely times in the history of a nation when some Arabian genie, moving with vast and dusky wings through the darkness of the night, scatters with careless hand some star dust from another planet, which falls in odd nooks and corners and quiet country towns. And from this magic powder men spring up different to their fellows, gifted with power, and insight, and imagination. Such a time was the eighteenth century in Scotland, and such men as Scott and Burns, David Hume and Adam Smith, Watt and Brewster, grew up amongst us. Such periods in the history of a nation are rare, and quickly pass, and the dull manufacture of worthy mediocrities begins afresh.

In the little town of Jedburgh, and in the year 1781, David Brewster was born. Intended by his father for the ministry of the Established Church of Scotland, he was sent at twelve years of age to Edinburgh University, and took his M.A. degree when nineteen. A devout and earnest believer in the Calvinistic faith, he seriously intended to enter the Church, and preached on more than one occasion. But nature had destined him for other purposes, and the trend of his native genius towards scientific research was too strong to be resisted. Nor was this the only influence which led him in this direction. During his boyhood he had come in contact with one of those remarkable men who seem to be peculiar to

Scotland, men who, while content with some humble position in life, are earnest and thoughtful students.

Most of us, I imagine, when looking back on our boyhood, can recall to memory some individual or some special set of circumstances or some hobby of our own, to which we owe our real education. From schoolmasters and University professors we have acquired certain information which is both necessary and useful, and which we would not be without, but that one bit of knowledge which is a living plant throwing out fresh shoots each year, and enabling us to do something of our own which is not merely imitative of our fellows, was obtained by us when, if we had listened to our teachers, we were wasting our time. Such an influence came into young Brewster's life through his association with Veitch. Veitch owned a small property near Jedburgh, and eked out his living by making ploughs, but all his leisure was devoted to the study of optics, and to the making and improving of telescopes, and the happiest hours of Brewster's boyhood were spent in Veitch's workshop, helping him to grind his lenses and to polish the mirrors for his telescopes. And so when he obeyed the irresistible call of science, he naturally turned to the investigation of the properties of light as the fitting subject for his lifelong researches.

Few departments of science offered at that time a more fascinating field for the investigator, the wonderful and beautiful phenomena of polarisation, the new impetus given to research by Young's wave

theory of light, suggested long before by Hooke, and delayed in acceptance by the weighty authority of Newton, the investigation of the Fraunhofer lines in the spectrum of the sun, and, later, the astounding discovery that through them we could identify the components of distant stars, were enough to cause a lifelong devotion to this department of research. And though we do not owe to Sir David Brewster the discovery of any profound principle, such as Young's wave theory of light, yet his clear and brilliant intellect and inexhaustible enthusiasm and fertility of resource and invention led him from experiment to experiment, and the piling up of fresh facts which were of the greatest value. Some idea of this unwearied enthusiasm may be gathered from a mere statement of numbers. His first paper, on "Remarks on Achromatic Eyepieces," was published in the year 1806, and his 315th paper, on "The Motion and Equilibrium of Liquid Films," was published in 1868, just after his death. Although this is hardly the place to enter into a discussion of the value of his contributions to the subject of polarisation of light, some of his more familiar inventions may be referred to, such as the Lenticular Stereoscope, the Kaleidoscope, and the Polyzonal Lens built up in sections, and the Dioptric apparatus. The Polyzonal Lens was first described by him in the "Edinburgh Encyclopædia," and was designed to enable the heat of the sun to be concentrated for industrial purposes, but he also saw its applicability to lighthouses, and for many years

urged its adoption on those in authority. In the meantime Fresnel had invented the same form of lens in France, and it had at once been applied to French lighthouses, enabling for the first time a long reaching parallel beam of light to be thrown across the waters, and Sir David Brewster had the mingled pain and pleasure of seeing his invention applied for the first time in this country to the Inchkeith light, as a French invention copied from the French lighthouses.

There is no space here to describe the whole career of Sir David Brewster, his early editorship of the *Edinburgh Review* and of the "Edinburgh Encyclopædia," his close association with the great men of his time, and his personal friendship with Sir Walter Scott, his connection with the founding of the British Association and with the great Exhibition of 1851, his visits to Paris to meet the brilliant discoverers then gathered there, his Principalship of St Andrews and, finally, of Edinburgh University.

The personality of the man is of more value to us than his external acts and honours, and is revealed in many pages of his life, as written by his daughter, and through him the personality of the typical discoverer in the realms of pure science. And these revelations of character are of value to us because the whole impulse and meaning of the scientific movement is still curiously misunderstood by men of the scholastic type of mind. They imagine that Bacon began it all by his laborious scheme for scientific research in the "Novum Organum." As Sir David Brewster truly

says, "No scientific discovery ever has come, or will come, from Bacon's method of research, for the first gift required for the researcher is the gift also of the poet, a vivid imagination." But as the ingenious author of "Heretics" dimly and resentfully feels, even this is not the root of the matter. The impulse which has governed so many men and bent their lives to such absolute devotion to scientific research, is an ethical impulse, and its two watchwords are Humility and Faith—a humility that merely asks of Nature to be taught, and patiently questions and questions until the right answer is obtained; a faith in the ultimate rightness of things, in the all-importance of truth as the one thing that matters, sublime in its absolute trust and its fearless courage. And this humility and this faith are all the more profound because these men of genius have themselves been unaware, and have pursued their investigations with the pleasure and unconsciousness of children.

Sir David Brewster's external life was full of fighting, anxiety, and trouble, but once in his laboratory, with its seeming confusion of bits of glass and wire, all troubles were forgotten, and his daughter tells us how, when busied with some new experiment, he used to make a low, purring noise, which was the sure sign of happiness and contentment, while she quotes from another how she used to watch him sometimes, when he was working far into the night with his microscopes, and "after a while he would forget I was there, and I have often seen him suddenly throw

himself back in his chair and lift up his hands and exclaim, 'Good God! Good God! how marvellous are thy works!'"

If we look across the Forth on a dark clear night towards the island of Inchkeith, we suddenly see a bright star flash out and fade, and flash and fade again with rhythmic beats. And remembering how we owe to Sir David Brewster the invention which converted the old lighthouse with its uncertain feeble illumination to the marvel we know to-day, we can almost imagine that it is his spirit which is watching there, and throwing the clear and brilliant ray of his genius on many a mystery of Nature, as the lighthouse throws its swinging beam of light over the dark and troubled waters of the sea.

VISCOUNT PALMERSTON

BY A. F. WHYTE, M.P.

Album Academiæ Jacobi VIti Scotorum Regis.
Vol. II.
Ab A.D. 1786 ad A.D. 1803.
Chirographa eorum Discipulorum complectens qui Bibliothecam auxerunt.
1800. Henry Temple, Honble., Math., Eth., Hist. Civ.
1802. Henry Palmerston, Phys., Eth. 2.

VISCOUNT PALMERSTON

BY A. F. WHYTE, M.P.

ON the opposite page is shown the scanty record of the dealings of our Alma Mater with one of her most distinguished sons. We might not even have had so much had Henry Temple not seen fit to make use of the University Library, for matriculation was not made compulsory till 1812, and therefore the University records are very incomplete. We gather, however, from the foregoing entries in the Library register that in 1800 Henry Temple took the classes of Mathematics, Ethics, and Civil History, and in 1802 Physics and Ethics, the latter for the second time. What he was doing in 1801 we cannot tell.

Henry John Temple, Viscount Palmerston, was born on 20th October 1784. His career ran:—

Left Harrow, 1800; student at Edinburgh, 1800-03; succeeded to the Peerage, 17th April 1802; M.A. Cambridge, 1806; Lord of the Admiralty, 1807-09; Secretary "at War," 1809-28; Foreign Secretary, 1830-34, 1835-41, 1846-51; Home Secretary, 1852-55; Prime Minister, 1855-58, 1859-65.

Palmerston came of famous ancestors, chief among whom was the famous diplomatist, Sir William Temple, the friend of William III. and the patron of Swift. He was the eldest son of the second viscount of the name, whose interest in art led him to spend much of his time in Italy. Thus it was that some of the earliest impressions formed in the mind of the future English Foreign Secretary were those of a foreign country,

the course of whose politics he watched with deep interest in his later years. From Italy Harry Temple went to Harrow, and though we are not concerned here with his schoolboy years, one item is too good to omit. He formed a friendship with Francis George Hare, the eldest of four accomplished brothers, two of whom, Augustus and Julius, afterwards earned fame as the authors of "Guesses at Truth." In a letter written to Temple from Italy, Frank Hare had said, "I still persist in my opinion of never marrying, and I suppose you think the same, as you must have read as well as myself of the many faults and vices of women." To this Harry Temple, a Harrovian of fourteen years, gravely replied, "I cannot agree with you about marriage, though I should be by no means precipitate about my choice," an intention which, as his biographer sententiously remarks, was literally carried out.

It was the fashion at the time of Temple's youth for young men to take our own University as a kind of preparatory college for Oxford or Cambridge. Hume, Robertson, Adam Smith, and Dugald Stewart attracted many men to Scotland. In Edinburgh Dugald Stewart's lectures on Moral Philosophy and Political Economy eclipsed all others in importance, and it was only natural that a young nobleman with political inclinations should apply himself assiduously to the study of Political Economy. Stewart's lectures were in great measure *extempore* conversations, but young Temple took such careful notes that when Sir

William Hamilton undertook to publish "Dugald Stewart's Lectures on Economical Science," he found the only complete and coherent version of them in the long memoranda originally written in shorthand and subsequently copied out by the young English nobleman. Of his faithful student Stewart wrote in a letter dated 27th April 1801: "With regard to Mr Temple, it is sufficient for me to say that he has constantly confirmed all the favourable impressions of him which I received from your letter. His talents are uncommonly good, and he does them all possible justice by assiduous application. In point of temper and conduct he is everything his friends could wish."

We may perhaps regret that there is no spice of devilry to be found in the young statesman's career in Edinburgh, or at all events that there is no record of escapades to relieve the monotony of his model life. However, his own autobiographic account of his time in Edinburgh, though brief, is a splendid testimony to his great teacher. "I lived," he writes, "with Dugald Stewart, and attended his lectures at the University. In these three years I laid the foundation of whatever useful knowledge and habits of mind I possess."

THOMAS CARLYLE BY
SIR JAMES CRICHTON-BROWNE

THOMAS CARLYLE BY SIR JAMES CRICHTON-BROWNE

A DARK, frosty November morning in 1809, and a wiry little fellow not yet fourteen, shrinking and sensitive but with hot blood too, clad in hodden-grey, trotted along the village of Ecclefechan accompanied to its verge by his father and mother, and then, under the guardianship of a boy two years his senior, began a journey on foot of a hundred miles, and five days' duration to that seat of learning where, with aching heart (for was he not leaving his mother?) and with boundless hope (for what might not his new mother do for him?), he was to enter on a course of study, "attend the classes," and gain knowledge of all kinds.

A bright spring afternoon in April 1866, and an old man of seventy-one, bowed, rugged, and worn, but glowing still with spiritual ardour, in a silken academical robe heavy with bullion, surrounded by officials and dignitaries in crimson and ermine, mounted the platform of the Music Hall in Edinburgh, packed from floor to ceiling, and reverberating with plaudits of enthusiastic welcome, to thank young Scotland for the highest honour it could bestow upon him, to sum up with touching solemnity the lessons learnt in a studious life, and to bid those entering on their studies then, "work and despair not."

It was "a perfect triumph," as Tyndall said; the poor stone-mason's son, friendless and forlorn but rich in dauntless resolution, had by sheer brain-energy raised himself from what seemed hopeless obscurity,

and in spite of countless obstructions, to the pinnacle of fame. He was Lord Rector of the greatest University of his native land, surrounded in homage by the most illustrious men of his time, full of wisdom and learning, delivering a message that was received with world-wide acclamation.

It was a toss up whether Carlyle went to the University at all. There was a large family to be provided for, and means were scant. The wise men of Ecclefechan advised that it would be a risk and a waste of money to educate him above his station, but his father had discernment and courage. The schoolmaster's reports were favourable; he saw something uncommon in the boy, and was particularly struck by his handling of sums—a matter of which he could judge —and so he resolved to make the venture. Small Tom was sent to Edinburgh as a step to that parish pulpit in which, it was hoped, he would one day wag his head, but with no dream of that universal and apocalyptic pulpit, from which he was destined to address as large a congregation as ever modern preacher has spoken to. Had it been otherwise, had the boy been set to delve the clods of Annandale, or apprenticed to some humble trade, he would still have been Thomas Carlyle. Genius like his no barrier can restrain. By some other route he must have come to the front, but the other route might have been more tedious and laborious, and beset with perils, so we must be thankful that in the company of Tom Smail he made that wintry pilgrimage by Moffat and Airock Stane, set-

tled down in the mean lodging in Simon Square, and matriculated as a student in the University of Edinburgh.

There is no part of Carlyle's life of which we know less than his undergraduate career in Edinburgh, extending from 1809 to 1814—his thirteenth to his eighteenth year. He tells us that while he was at college his father wrote to him "duly and affectionately," and there can be no doubt that he "duly and affectionately" replied, but none of his correspondence with his family earlier than the year 1814 has been preserved. There are, I believe, in existence a number of letters from several of his eleven chosen friends at the University—eleven out of eleven hundred students, and it is curious how teams of all kinds run into elevens—and these will, it is to be hoped, be published some day; but they are not accessible to me, and if they were, the limits prescribed to me would prevent me from quoting them; and even if I could quote them, they would not probably throw much light on Carlyle's student days, for the letters of these friends of his, clever lads, distinctly superior to ordinary youths of their age, peasants' sons like himself, with their way to make in the world, were not, if we may judge from the specimens that have been given, so much biographical and anecdotical as critical and didactic. They discuss Scott's last novel, Byron's poems, the fall of Napoleon, mathematical problems, and sermons, but afford no insight into University doings or college customs; they do not even contain any poking

of fun at professors. They show, however, unmistakably, that the life led by Carlyle and his college friends was pure, simple, and high-minded, free from any of that ribald taint that sometimes infects adolescent intercourse; they prove, too, that even then Carlyle was a leader amongst men. His friends looked to him to direct their judgment, to advise them in their difficulties, and even to help them, when need was, out of his small savings, and they one and all recognised that he was superior to other young men of his age in character and intellect, and was destined to greatness of one kind or another. Had he been a member of any University literary or debating society, which he was not, he would undoubtedly have been president and dictator.

One of Carlyle's student-friend correspondents, named Hill, who addressed him as "Dear Doctor," or "Dean," and subscribed himself "Peter Pindar," supplies in his letters, which have been published, some faint forecasts of later Carlylean traits. He chaffs him for being peevish and splenetic, praises his effective power of speech, and compliments him on his mirth and wit, but thinks him too sarcastic for so young a man. And Hill further makes it clear that Carlyle escaped one of the exanthems of undergraduate days, and never had a love affair nor even a flirtation while in Edinburgh. "Fall in love," says Hill, writing in 1814, "fall in love as soon as you can. Fall in love, you will be the better for it." But not until he was twenty-two years old and schoolmaster-

ing at Kirkcaldy, did the first graceful delicate shoot of the tender passion spring up in his heart, when the celestial orbit of Blumine or Margaret Gordon intersected his sublunary one—a shoot that was soon to be chilled, and to droop and wither away.

And outside his correspondence there is little to be learnt from Carlyle's writings of his undergraduate experiences. In his "Reminiscences" he makes few references to his four to five years of pupilage in Edinburgh; and indeed, it cannot be denied that he did not look back to that epoch of his life with very pleasurable or grateful feelings. He was not, he thought, fortunate in his seminaries. Of the Annan Academy he had painful and resentful recollections, and his denunciation of it is scathing. "One way and another," he says, "I was never so wretched as here in that school, and the first two years of my time in it still count amongst the miserable of my life. . . . Unspeakable is the damage and defilement I got out of these coarse, misguided, tyrannous cubs. . . . Academia! High School Instructors of Youth! Oh ye Unspeakable!"

Against his University Carlyle was not thus embittered, but he does speak of it somewhat disparagingly, and nowhere does he turn to it with the love and reverence which students of my time never fail to manifest towards it, and which students of a later date still more joyfully express. Only in the evening of his days, when the distance grew mellow and golden in the twilight, did he refer to it as "my dear old Alma Mater."

EDINBURGH STUDENTS

The fact is that in his time the University was a somewhat cold, almost a negligent mother. She has softened her mood and warmed her heart since then, and learnt to bestow all due maternal attention on her progeny; by the old standard she might even be said to coddle them. Carlyle's approach to her lap was, as I have already said, a weary pilgrimage for a small boy, and when he arrived there, footsore and expectant, he found little to cheer or encourage him. St Giles' High Kirk, the Lucken-Booths—where old women in miniature shops sold combs, shoe-laces, and trifles—and the Parliament House as seen in the evening lit with candles and in strange chiaroscuro, with its crowd of human creatures, some in wigs and black gowns, and its boundless buzz of talk, impressed him vividly on his arrival in Edinburgh, and dwelt in his memory, but he has not much to say about the University. "I learned little there," is his verdict. There does not appear to have been much individualisation of the students at that time, for Professor Christison in the Latin Class never noticed him, nor could distinguish him from another, Mr Irving Carlyle, an older, bigger boy, with red hair, wild buck teeth, and scorched complexion, and the worst Latinist of his acquaintance.

In Philosophy it was not much better. Dugald Stewart had given place to Brown, whom Carlyle found unprofitable, "bewildering and dispiriting as the autumn winds amongst withered leaves," but in mathematics he got surer foothold and made progress. Pro-

fessor Leslie discovered his taste and his talent, and exerted himself to help him with a zeal of which he ever afterwards spoke with gratitude. "Leslie alone," he says, "of my Professors"—a grievous indictment against the faculty—"had some genius in his business, and awoke a certain enthusiasm in me. For several years geometry shone before me as the noblest of all sciences, and I prosecuted it in all my best hours and moods."

"Sartor Resartus" is only intermittently biographical, but it is not difficult now, in view of the evidence available to pick out the bits that depict Carlyle's own career, and the references to Teufelsdörckh's University are unquestionably applicable to Edinburgh. "Had you anywhere in Crim Tartary," he writes, "walled in a square enclosure, furnished it with a small ill-chosen library, and then turned loose into it eleven hundred Christian striplings, to tumble about as they listed from three to seven years, certain persons, under the title of Professors, being stationed at the gates to declare aloud that it was a University, and exact considerable admission fees—you had, not indeed in mechanical structure, yet in spirit and result, some imperfect resemblance of our high seminary.... We boasted ourselves a rational University in the highest degree, hostile to mysticism; thus was the young mind furnished with much talk about progress of the species, dark ages, prejudice, and the like, so that all were quickly enough blown out into a state of windy argumentativeness, whereby

the better sort had soon to end in sick impotent scepticism; the worst sort explode in finished self-conceit, and to all spiritual intents become dead. . . . The hungry young looked up to their spiritual nurses, and for food were bidden eat the east wind. What vain jargon of controversial metaphysic, etymology, and mechanical manipulation, falsely named science, was current there I indeed learned better than most. Among eleven hundred Christian youths there will not be wanting some eleven eager to learn. By collision with such a certain warmth, a certain polish was communicated; by instinct and happy accident I took less to rioting than to thinking and reading, which latter also I was free to do. Nay, from the chaos of the library I succeeded in fishing up more books than had been known to keepers thereof."

It is perhaps the average children and the weaklings who profit most by the mother's care, and who are afterwards most conscious of what they have owed to it; the strong are more independent of it, and appreciate it less. And as in the family so is it in the University. The below-par and level-minded men are most alive to the educational advantages it offers, and derive from them most benefit, while the vigorous intellects tend to undervalue them, and forge ahead, as they think, in their own prowess. But even the vigorous intellects are often more indebted than they imagine to the aids and methods they decry, and whatever the drawbacks and deprivations of his time may have been, the University of Edinburgh was of

incalculable service to Carlyle, and had a large share in the making of him. It gave an opportunity and a basis for that self-culture which is the vital element in all education. It gave him breathing space and atmosphere, and quickened and deepened his mental respiration at an age when without these, crippling contractures are apt to set in; it imparted stimulus to his powers. If the teaching was weak the discipline was splendid. The life was bracingly frugal and thrifty. He had sent from home oatmeal, potatoes, salt butter, and eggs, and in the return cart his linen went home to be washed and mended. Think of that, ye gilded youths of the Union!

Neither the University chest nor the students' pockets afforded funds for tutorial instruction in these days. The Professors harangued large classes and scattered seed sound and unsound, some of which fell on stony places, but much of which took root in good ground, and bore fruit in due season, but they had no leisure to devote to the advancement of promising pupils. As regards science, it was words, words, words; laboratories, specimens, apparatus, and demonstrations were unknown. But a fine sense of self-dependence was engendered, heat and light were generated by the contact of mind with mind, a certain ground plan of life and human nature was somehow fashioned. It was while an undergraduate at Edinburgh that Carlyle learnt to read fluently several languages, and obtained some grasp of science such as it was. The foundation of his literary life was there,

he has admitted, laid.

Carlyle's undergraduate career was prematurely cut short. He went through the whole Arts course, occupying four years, but did not take the Arts degree because no one then did so. It was not regarded as of either pecuniary or honorific value. It was substantial acquirement that was sought after, not a string of alphabetical tags, always more or less equivocal. He quitted the University in 1814, and went to teach in Annan Academy, still with some potential outlook on Divinity, intending as a rural Divinity student to visit Edinburgh for a few days each year, and deliver certain discourses. Six years of that would have brought him into the ministry, or four years of continuous attendance at Divinity Hall in Edinburgh. But his enthusiasm for that line of life had long died out, if indeed it had ever lived; prohibitive doubts had invaded his mind, and although he detested his situation at Annan, all thoughts of seeking refuge from it in the Church were abandoned. He did not after 1814 return to Edinburgh as an undergraduate.

In connection with Carlyle's undergraduate career there is not one allusion to any sport, pastime, or recreation, beyond his meetings with his friends and a pipe of tobacco. Beyond snowball bickerings, there were apparently no games or pastimes in the University. Puritantical notions still prevailed as to the sinfulness of frivolous amusements, and the boys were desperately in earnest to make a living. It was a grievous deficiency, and I rather think Carlyle, although

he does not mention it, had a more serious grudge against the University for its neglect of his physical than of his mental training. Then began that dyspepsia which pestered him for the rest of his life. He ultimately took to horse exercise when it was too late, but he never felt an interest in any mere game. The thing wanting to him was golf. A couple of rounds a day would have saved him much misery, and the spoon, the niblick, and the cleek would have afforded vent for all the minor irritabilities.

And what about the holidays, the long, long vacation in these days; seven months in duration, extending from April till November. The poor students, and most of the students to the north of the Tweed were poor then, had to contribute to the cost of their college expenses, by work of some kind in these intervals. They taught pupils or worked on the farm at home. Carlyle was not amongst the very poorest. His father's income had once reached £100. And we have no indication that he engaged in any kind of remunerative work during the recess. The probability is that he devoted himself entirely and diligently to his books, and piled up fruitful knowledge in the ample granaries of his brain. But under what adverse circumstances did he do this? And what inflexible will power must have been exercised to carry on study profitably amidst the incessant distractions around him. Not for him, the secluded studio, the well-shelved silent library, even the quiet closet. No doubt his good mother did her best, but the house at Ecclefechan contained

only three rooms, and so did that at Mainhill, and there were seven other children at home when Carlyle spent his holidays there. His studying or sitting room must have closely resembled that of Jean Paul Richter which he describes, and by the way, Carlyle seems to have been more influenced by Jean Paul in style and habit of thought than by any other author, and the histories of the two present many singular similarities. "Jean Paul's room," Carlyle says, "was a true and beautiful emblem of his simple way of thought, which comprehended at once the high and the low. Whilst his mother pursued her household work, occupying herself about stove and dresser, Jean Paul was sitting in a corner of the same room, at a simple writing desk, with few or no books but merely with one or two drawers containing excerpts and manuscripts. The jingle of the household operations seemed not at all to disturb him any more than the cooings of the pigeons which fluttered to and fro in the chamber." But Jean Paul's situation was tranquillity itself compared with that of Carlyle at Ecclefechan and Mainhill with the children plus the domestic turmoil and the pigeons, and remembering what he must have suffered in these days, while struggling with mathematics, dabbling in philosophy, and holding high converse with Homer, Æschylus, and Horace, in a domestic hubbub and imbroglio of noises, we can understand the craving for solitude which ever afterwards possessed him ("If I had wings I would fly to Italy, fly to Saturn, somewhither where I could

be alone") and the intolerance of noise he displayed, which through various stages of intensification led to the war against cocks and hens, and ultimately to the sound-proof room under the roof at Cheyne Row, into which he was, he affirmed, "whirled aloft by angry elements."

Last of all in the hours of retrospect and bereavement, tender memories of his undergraduate days and affectionate feelings for his Alma Mater must have dominated Carlyle, for in 1867, the year after his wife's death, he bequeathed to the University of Edinburgh her estate of Craigenputtock. He did this in memory of his dear, magnanimous, much-loving and inestimable wife, and to show his interest in the advancement of education in his native Scotland, and provided for ten bursaries—five for proficiency in mathematics, and five for proficiency in classical learning. So ten undergraduates to-day have cause to think thankfully of the undergraduate from Ecclefechan of 1809.

LORD JOHN RUSSELL

BY WILL. C. SMITH, K.C.

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LORD JOHN RUSSELL was a leading member of the Whig Party for over half a century, and his name is inseparably associated with the constitutional questions which belonged to that party. Catholic Emancipation, the great Reform Bill, Municipal Reform, Poor Law Reform, Colonial Self-Government, National Education, the Irish Church, Civil and Religious Liberty, made the atmosphere in which he lived. He was a pure patriot, and a man of great moral courage. The phrases of the period show his popularity, even when they condemn his policy: "Johnny upset the coach" (upon the Irish Church Question); "Finality Jack" (upon Reform); "When languid Johnny glowed to glorious John" (Bulwer's description of his best speeches); and the inimitable footboy of Tenniel's cartoons in *Punch*. Bismarck once called him (when he agreed with Bismarck's anti-clerical policy) "the Nestor of European politics." He was generally right, and never more so than when he appointed Tennyson Laureate, and when he insisted on neutrality in the American Civil War. He had indeed something of the poetic temperament, and must have felt the force of Whittier's appeal to Great Britain: "We too are heirs of Runnymede, and Shakespeare's pen and Cromwell's deed are not alone our mother's." But he had his intellectual limitations and made some irritating blunders; none worse than the foolish Durham Letter, followed by the futile Ecclesiastical Titles Act

of 1851, which insulted the Roman Catholics without any advantage to Protestantism. *Punch* described him as a street gamin who chalked up "No Popery," and ran away. His career was a triumph of mind over matter, for he was "in person diminutive and rickety"; in speaking "he wriggled round, played with his hat, and seemed unable to dispose of his hands and feet"; his voice was small and thin, and his gesture of the most mechanical regularity. Some one said, "his mind was too great for his body, and his intellect was indecently exposed." When he went down to Devonshire in 1831, as the hero of Reform, Sydney Smith relates that "the people along the road were very much disappointed by his smallness. I told them he was much larger before the Bill was thrown out, but was reduced by excessive anxiety about the people. This brought tears to many eyes." The same humourist is responsible for the famous caricature of Russell's belief in his own powers: "I believe Lord John Russell would perform the operation for the stone, build St Peter's, or assume—with or without ten minutes' notice—the command of the Channel Fleet, and no one would discover from his manner that the patient had died, the church had tumbled down, and the Channel Fleet been knocked to atoms." But after all it was no ordinary man who occupied the offices of Home Secretary, Colonial Secretary, and Foreign Secretary, who was twice Prime Minister and frequently led the House of Commons, holding his own with Grey, Palmerston, Derby, Peel,

and Gladstone. As Disraeli said, "It is difficult to ascertain at what period, or under what circumstances the Whig Party have ever possessed, or could obtain, a more efficient leader." He said some notable things: "When I am asked if such or such a nation is fit to be free, I ask in return, is any man fit to be a despot?" "There is something worse than the cant of patriotism, and that is the recant of patriotism." "It is impossible that the whisper of a faction can prevail against the voice of a nation."

Such was the public life of the student who, from autumn 1809 to the summer of 1812, worked at our University, and lodged with Professor John Playfair, whom he described as "the most benevolent and most liberal of all philosophers." The chief record of his activity is in the history of the Speculative Society, which he attended for three years, being admitted 24th April 1810. The son of the ducal House of Bedford, remarkable not less for its great experiments in agriculture, sylviculture, and reclamation, than for the art collection of Woburn, must have had special resources for University life. Even at that age he had met Scott at Abbotsford and Wellington at Burgos. In the society he met many interesting men: Maitland (afterwards Lord Dundrennan), a sound lawyer from Galloway; John Wilson, or Christopher North; Thomas Erskine of Linlathen, a somewhat mystical theologian; William Hamilton, afterwards leader of the Scottish school of Metaphysics; Clerk of Penicuik; Kennedy of Dunure. Andrew Rutherfurd, afterwards

Lord Advocate and judge, was also among the legal members of about that date. Russell contributed two essays: "The Proceedings of the Cortes of Spain, from 24th September to 15th November 1810," when a republican constitution was adopted at Cadiz; and "The Beauty of the Material World." He spoke in favour of the resolutions that "The Education of the Poor is Advantageous to Society; that "The Emancipation of South America is Desirable"; and that "The Expedition to Copenhagen in 1807 was Justifiable." This expedition was to checkmate the schemes of Napoleon by insisting on the surrender of the Danish Navy. In 1812 he delivered the valedictory address. It is impossible to glean any details of the impression made by Russell on his young contemporaries. Let us hope he had his share of "high jinks" and the roaring supper parties of the Society. No son of the Alma Mater ever developed into a more worthy public servant of his country, "whose freedom," as he said, "I have always worshipped."

JAMES SYME, SURGEON BY JOSEPH BELL, M.D.

JAMES SYME, SURGEON BY JOSEPH BELL, M.D.

JAMES SYME as an undergraduate did not take many University classes, nor did he spend much time within its walls. Botany and Chemistry were his chief studies. He got his Anatomy from Barclay, the famous extra-mural teacher; nor did Syme ever take the degree of M.D. Still we have a right to claim him as a famous undergraduate in the University where for thirty-six years he held one of its principal chairs. Without being *laudator temporis acti*, it is not too much to say that the medical faculty of the University contained a quite exceptional number of men of commanding talents. Simpson and Syme, Goodsir, Christison, and Bennett are names to conjure with still, and of this brilliant galaxy Syme was a bright particular star.

This notice is an appreciation, not a biography, but a date or two may help. Born on 7th November 1799, James Syme had an excellent education, chiefly at the High School of Edinburgh. Always an enthusiast in Chemistry, before he was twenty he made important practical discoveries which, had he gone into business, might have given him wealth. Botany was a hobby, but Anatomy was his chief study. Before he was nineteen he was an Anatomical Demonstrator under Liston, but he soon gave up teaching Anatomy to devote himself to surgical teaching and practice. He took the Fellowship of the Royal College of Surgeons in 1823, unsuccessfully tried to get wards in the Royal Infirmary, and with extraordinary pluck

and daring started an hospital of his own, with twenty-four surgical beds, two house surgeons, a complete staff of nurses and dressers, and an out-patient department.

In 1833 Syme got wards in the Infirmary and the Chair of Clinical Surgery, from which for the next thirty-six years he taught Clinical Surgery as it had never been taught before, operated with daring, originality, and success, and infused something of his own spirit into numberless pupils.

After a life exceptionally healthy, vigorous, and fortunate, he was attacked by cerebral hæmorrhage and hemiplegia on 6th April 1869. Soon afterwards he resigned his chair, regained some slight measure of health, but died after a succession of seizures on 26th January 1870.

Syme's contributions to surgical progress were very numerous, and some of them most important. The amputation at—or rather above—the ankle joint, which is known all over the world as "Syme's" was an extraordinary improvement in the treatment of diseases of the tarsal bones. Prior to his invention all such cases suffered amputation of the leg, deaths were frequent, and the resulting stumps were often fit only to be used with a pin wooden leg on which the knee rested. A "Syme" well done is practically the only stump on which the patient can bear his full weight without its being distributed. He was the first in Scotland to perform disarticulation of the hip joint. He perfected the methods of excision of the

shoulder and elbow joints. He showed the way in excision of the whole tongue for cancer, and laid down definite principles regarding the operation. He was a pioneer in excisions of the upper and lower jaws for tumours. He devised and executed operative measures for the relief of intractable and resilient stricture of the urethra. He excised the scapula, and wrote a short monograph on the subject. Some of his most daring and successful operations were those in which he treated aneurisms, some by ligature of vessels, and others by direct incision and ligature of the vessel above and below the point of escape of blood. Carotid, axillary, gluteal, and external iliac aneurisms were all treated by measures splendidly devised and executed with skill and daring. To read of them, told in his brief, pregnant sentences, is still exciting; to see him perform them was an education. Plastic operations on the face and eyelids he planned and executed with great success. He would remove a whole lower lip for epithelioma, and fill the gap by well-planned flaps, obtained from skin of neck and chin, and it was marvellous how little deformity resulted. The mucous membrane was borrowed from the inside of the mouth.

As a surgical author his style was characterised by brevity and directness. No word wasted, no indecision as to principles, no padding or fine writing. In consequence, his "Principles of Surgery" is probably the only work of its kind, the later editions of which are shorter than the earlier ones. It gives principles,

not details, quotes no ancient authorities, does not burden the memory with antiquated theories, but puts the broad facts before his readers in such a manner that, even if read in the light of the present day, there is little to correct or contradict.

As a teacher of Clinical Surgery his method was perfect. The Lecture Theatre was crowded by an absolutely quiet and attentive audience. The class kept itself in perfect discipline. The front benches were reserved for his dressers and clerks who were not on duty for the day, for old pupils, and distinguished visitors. A little chair was placed in the area to the left of the operating table. The house surgeon sat behind the lecturer, the chief instrument clerk by the side of the instrument table. Punctual as a clock he stepped to the chair, sat down, and the first patient was brought in. Possibly the first few minutes might be given to a short report on cases lectured on previously or operation performed.

Case after case was brought in, diagnosed, reasons for diagnosis given with absolute clearness and certainty in a few well-chosen words. The necessary treatment was mentioned, sometimes done at once, sometimes postponed till a more suitable time, for Mr Syme did not regard his lecture as merely a series of operations tempered by remarks. His voice was rather feeble and muffled, so perfect silence and close attention were needed, but the instruction was felt to be so priceless that never was it necessary to enjoin silence. Syme's method gave the keynote to the teach-

ing of the Edinburgh School in Clinical Surgery, and the traditions of the Chair have been well maintained.

Students used to take a perpetual ticket for Syme in their first year, and, like the writer of this, try to be at the lectures every Monday and Thursday during their whole student life. Medical colleagues came down from the medical house to hear him lecture and see him operate. Indeed, one well-known physician used to be called by Syme the "Stormy Petrel" of Surgery, as he tried never to miss a big thing.

His method of operating was chiefly remarkable for extreme quietness of manner and movement. He rarely moved his feet, but kept his selected position unchanged; little movement even of back and shoulders, the work was principally done from elbow and wrist. He was neither specially dexterous nor specially rapid. In some operations, such as lithotomy and larger amputations, he was not at home from want of length of fingers and of muscular power. In all, however, his hands were absolutely steady and deft, the knife went exactly where he wanted it to go, and with neither haste nor hesitation. He used few instruments; provided the knife was sharp he did not change it during an operation. He rarely spoke, expected his assistants to be as quiet as he was and to hand things unasked. I remember once being asked by an onlooker if we were in disgrace, as Mr Syme never spoke to us. Never flurried himself, he expected his assistants to keep quiet too, and a little bleeding did not make him drop the knife and stop to tie

a vessel, but he just went on, and tied them all when it was over. He had seen too much blood in the old blood-letting days, and knew that the blood lost during an ordinary operation was usually a comparatively small quantity.

He used very simple dressing after an operation, warned us against tension, and encouraged wound drainage by leaving the silk ligatures out at one corner. Even in that dark age when asepticism was unknown we had many stumps healing practically by first intention.

In Syme's day the domain of Surgery was comparatively limited, for many of the operations on the abdominal organs and the intestinal canal, now of every-day application, were practically unknown. The peritoneum, instead of being the surgeon's friend, was considered his deadly enemy, resenting the slightest interference, and brain surgery was limited to the frequent use of the trephine for accident. Operations for brain tumours were regarded as hopeless, even if any scientific diagnosis had revealed their presence. The numerous operative procedures on throat and nose which now provide such comfortable subsistence to the specialist were represented by removal of polypi, draining the antrum, and tracheotomy. The amount of instruction the student of Surgery received on Diseases of the Ear was pleasantly summarised in the famous clinical lecture—"Diseases of the Ear are of two kinds—*Curable*, the province of the Surgeon, including clearing the meatus of wax and blistering

the back of the ear; *Incurable*, the province of the Aurist."

Aseptic Surgery and anæsthetics have rendered possible the extraordinary progress of the past half-century. Still, we can claim for Syme to have made advances by his own genius almost as remarkable in his forty years' work in Edinburgh. His pupils and assistants carried on the work of progress. Among these, the name of Syme's successor, Thomas Annandale, will be long remembered as one worthy to occupy his master's chair.

We must say something about Syme as a man. He was rather under the middle height, squarely and solidly built about chest and shoulders, with small hands and neat feet, active on his legs even to old age. His dress was quite peculiar—a black swallow-tail evening coat, with a light-coloured waistcoat and trousers, and a tie (generally of a black-and-white or blue-and-white check pattern); it was pretty original. His habits were exceedingly regular and simple. An early riser, he went round his garden and splendid hot-houses before breakfast, walked into town, unless the weather was very bad and was in his chambers before ten o'clock. Punctual in his attendance at the Infirmary, and back to his chambers for an hour or two. In the afternoon he was back in his garden when he could manage it, dined early, and went to bed early.

Of a very shy and reserved nature, strangers sometimes found him distant and at first grim. He had no

parlour tricks, was a most loyal friend and a determined foe. He always was a man of war, was a principal in several lawsuits, and once nearly fought a duel. But it was a quarrelsome and litigious age, and Syme had the courage of his opinions, battled for what he thought was right, and would not let go. The late Dr Paterson of Leith published an interesting volume of "Memorials" in 1874, in which many of those controversies are discussed at length.

The last great controversy in which Mr Syme took a share, or indeed the chief part, was what was known as the "Battle of the Sites."

The Royal Infirmary needed to be completely remodelled, and the question was whether it was to be done piecemeal on the old site in Infirmary Street and Surgeon Square, or was to be done entirely new on the magnificent site where it now stands. Mr Syme's cogent reasoning prevailed, and he won the battle, but at an expense of strength and nerve power which doubtless contributed to the final seizure.

The pages of the *Edinburgh Medical Journal* for August 1870 contain a much longer and more complete notice of Mr Syme, by the same hand that now (thirty-eight years later) has written this necessarily brief appreciation. It is impossible in such a short notice to convey to the present generation a full sense of the greatness of the man. But all men who came under the spell of his marvellous personality will agree with the summing up of his qualities by Dr John Brown, who inscribed his "Locke and Syden-

ham" to his own master thus:—

VERAX,
CAPAX, PERSPICAX,
SAGAX, EFFICAX,
TENAX.

JAMES NASMYTH, ENGINEER
BY E. M. HORSBURGH

JAMES NASMYTH, ENGINEER

BY E. M. HORSBURGH

JAMES NASMYTH was born in Edinburgh in 1808. His father, a famous Edinburgh artist and the founder of a Scottish school of painting, combined to a striking extent the artistic and the inventive faculties, and transmitted to his son that skill in draughtsmanship and love of handicraft which are such essential qualities for a mechanical engineer.

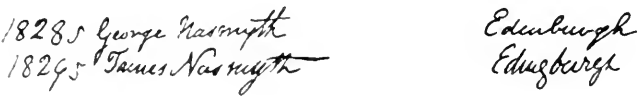
When a boy he attended the Edinburgh High School. Between the ages of nine and twelve he was able to use his father's lathe to manufacture tops and cannon for his school-fellows, and became so skilful that he kept himself in pocket money by this means. He stated with pride in later years that his "peeries" would spin twice as long as the bought ones, and could command any price in the school. The skill of this youthful artificer in wood and metal was remarkable. A little later he fitted up in his bedroom a small brassfounding establishment, and became quite expert in the casting of alloys. He said that the practical skill which he acquired at this time was of enormous value to him in later life. A meeting with James Watt, then a delightful old man of eighty-two, fired still further his engineering genius.

From 1821 to 1826, between the ages of thirteen and eighteen, he was an enthusiastic student at the Edinburgh School of Arts, the precursor of the Heriot-Watt Technical College. He continued to make models, chiefly of steam-engines, and some of

these he sold for about £10 each. Out of this he paid his father a small amount for his board, and laid out the remainder in joining certain classes in the University of Edinburgh.

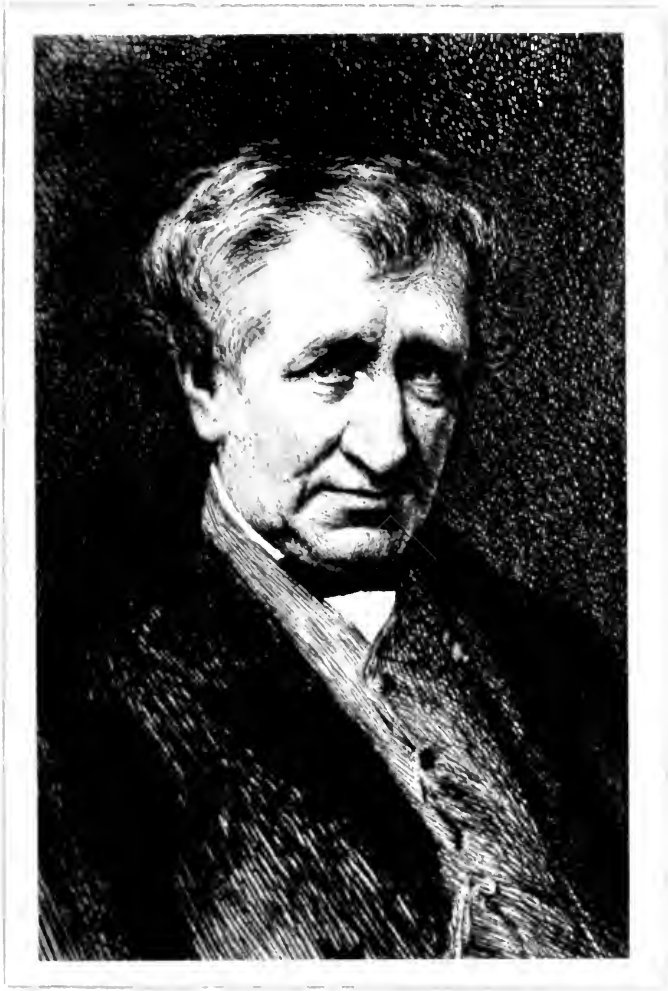
He says, "I attended the Chemistry course under Dr Hope, the Geometry and Mathematical course under Professor Wallace, and the Natural Philosophy course under my valued friend and patron, Professor Leslie. What with my attendance upon the classes and my workshop and drawing occupations my time did not hang heavy on my hands."

His name, with that of his brother George, appears on the Matriculation Album of the University as a Literary (*i.e.* Arts) Student, but he failed to fill up the columns of classes attended. The fact that he did not join his classes till as late as the middle of December gives food for reflection, as does also his spelling.



The classes chosen by Nasmyth for himself are those which now form the subjects for the first B.Sc., Eng. There was no University class in Engineering Drawing, so that he had to teach himself this subject. The Engineering Department in its modern form was only founded in 1868.

One can easily imagine how Nasmyth the student would have delighted in a University Engineering



Laboratory had such a place existed then, and how strenuously he would have worked therein, but one is tempted to speculate too on what position he might have taken under the present regulations. He had a keen appreciation of mathematics and of its fundamental importance to the engineer—in this he was far in advance of his times—but he was apparently somewhat slow at his studies. It is quite possible that while his laboratory and practical work would have been ideally good, he might not have taken nearly so distinguished an academic position as his later fame would have led us to expect.

At this stage Nasmyth used to visit all the engineering works in the neighbourhood and would sketch the engines, especially when there was any peculiarity in their construction. This took the place of a modern student's class in Drawing and Machine design. He followed exclusively that branch which is now called Mechanical Engineering, and in this he picked up his knowledge by the methods of the workshop.

When he was only nineteen he designed and made a working model of a steam road carriage, and exhibited it before the members of the Royal Scottish Society of Arts. It worked so well and members of the Society were so delighted with it that they subscribed £60 for the building of an actual car. Nasmyth built one which used to run on the Queensferry Road carrying eight passengers for four or five miles, so that he was a pioneer of the motor car industry.

He also invented, independently of George Steph-

enson, the steam-blast, to which we owe the practical success of the modern locomotive engine.

Owing to excessive application both in the workshop and in the University he had a serious breakdown at this time, which nearly had a fatal termination. Shortly after his recovery he resolved to go to London to get experience, if possible, under Mr Maudsley, one of the first mechanical engineers of the day, and took as credentials some of his models. These were of such excellent workmanship that he was at once successful, and became private assistant to his new chief.

At this time he made the famous dinner oven which enabled him to live within his wages of 10s. per week, and from this time he became entirely self-supporting.

Under Maudsley Nasmyth was approaching his full powers, and was a brilliant mechanical engineer, far-seeing, resourceful and inventive. The actual details of his work at this stage would be of too technical a nature to mention here.

Shortly after Maudsley's death, Nasmyth removed to Manchester, in order to set up in business for himself. He was now twenty-six years of age, and by the utmost care and economy this brilliant and indefatigable engineer had amassed the fortune of £63. He hired part of a factory flat in Manchester, and brought to it his father's original lathe, together with a number of heavy machine tools which he had gradually constructed.

He commenced in a small way with one assistant, but soon had to take in several. He became so successful that in a short time the factory floor began to give way under the weight of his completed orders. Feeling that he was now a capitalist, he decided to go into business on a larger scale. He selected carefully a site in Manchester, and established thereon what became afterwards one of the foremost engineering establishments of the world—the Bridgewater Foundry.

We see him as a most kindly and considerate man, with lofty moral principles, intensely artistic yet supremely practical and businesslike, supervising every detail, however trivial, a perfect glutton for work, an engineer, and an enthusiast. Such being the character of the man, success was bound to follow. Orders continued to pour in and his establishment grew continually. Machine tools were then superseding hand labour, and accuracy in these was the great engineering need of the age. He devoted himself chiefly to the manufacture and perfecting of machine tools, particularly to the kinds required in the construction of large engines. In this he was brilliantly successful and carried out admirably a great and lucrative locomotive contract.

At the age of thirty-two he married; about the same time he gave to the world the steam hammer, that invention on which his claim to fame chiefly rests in the eyes of the non-engineering public.

A paddle shaft thirty-six inches in diameter was re-

quired for the "Great Britain," but no forge in the world was large enough for its manufacture. So great was the difficulty that the designer actually thought he would be reduced to the use of cast iron. Nasmyth was applied to and in about twenty minutes he had sketched, in all its features, the modern steam hammer. The engines, however, were changed at the last moment from paddle to screw, and the hammer was not constructed. No firm in Britain took it up, and the invention seemed still-born. Some years later, when Nasmyth visited the Creusot works in the course of his continental tour, he saw what was then an enormous crank which had been forged successfully. "How was this made?" he inquired. "It was forged by your steam hammer," was the reply.

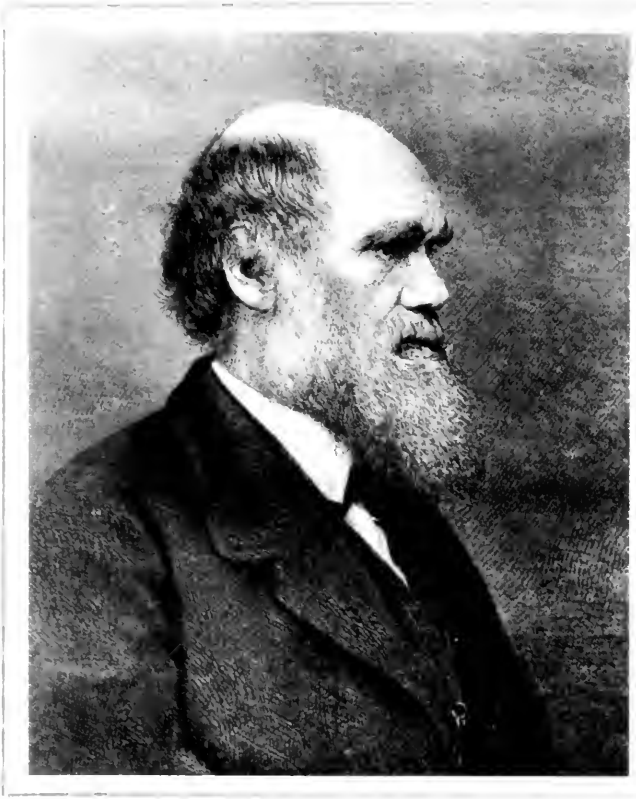
Nasmyth's fame had now spread over the continent. He was invited by the French Government to tour through France to give the benefit of his experience to the heads of the great arsenals. From France he passed to Italy. At a later date, still in connection with his business, he visited the countries of Northern Europe and was received by the Czar.

In 1845 he brought out his steam-hammer pile-driver which marked another enormous engineering advance. The catalogue of his inventions fills many pages and extends widely over the whole field of mechanical engineering.

In the course of years Nasmyth became a comparatively wealthy man, and was able to retire from active business at the early age of forty-eight. He still kept

himself fully occupied, but devoted himself to pure science and to his special hobbies, one of which was astronomy. He continued to make his own telescopes and published many interesting astronomical observations. He died in 1890.

CHARLES DARWIN ❧ BY PROFESSOR J. ARTHUR THOMSON



CHARLES DARWIN BY PROFESSOR J. ARTHUR THOMSON

IT was in October 1825 that Darwin—a boy of sixteen—came with his older brother to study Medicine in Edinburgh. They were following in the footsteps of their grandfather and their uncle, who had also been students in the famous school. After staying for a night or two at the Star Hotel, 36 Princes Street, the two brothers settled down in lodgings at 11 Lothian Street, four flights up. Their landlady, Mrs Mackay, was "a nice, clean, old body—exceedingly civil and attentive," as Charles remarks in his first letter home. "We spend all our mornings in promenading about the town, which we know pretty well, and in the evenings we go to the play to hear Miss Stephens, which is quite delightful. . . . Bridge Street is the most extraordinary thing I ever saw, and when we first looked over the sides, we could hardly believe our eyes when, instead of a fine river, we saw a stream of people. . . . We just have been to church and heard a sermon of only twenty minutes. I expected from Sir Walter Scott's account a soul-cutting discourse of two hours and a half."

Darwin was anything but keen on his proposed medical studies. There were many reasons for this. He was already—though he hardly knew it—a naturalist; the lectures, excepting those on Chemistry, were "intolerably dull"—that was very long ago; dissection disgusted him, and the only two operations he saw haunted him "for many a long year"; further-

more, his belief that his father would leave him enough to live on with comfort "was sufficient to check any strenuous effort to learn Medicine." We can fancy a professor regarding this youth as an exceedingly unpromising student. Speaking of dissection, by the way, we should remember what Darwin—always so honest with himself—afterwards said: "It has proved one of the greatest evils in my life that I was not urged to practise dissection, for I should soon have got over my disgust; and the practice would have been invaluable for all my future work. This has been an irremediable evil, as well as my incapacity to draw." As a matter of fact, Darwin's laborious monographing of the barnacles partly made up for his shirking of the dissecting-room discipline, and though he could not draw he gave to the world one of its few imperishable scientific pictures.

The Copernicus of Animate Nature, for that is what Darwin became, was certainly not precocious. His father ("the kindest man I ever knew") once said, "You care for nothing but shooting, dogs, and rat-catching, and you will be a disgrace to yourself and all your family." Let us take courage! Nor as a student was he brilliant, for as far as academical studies were concerned his time was completely wasted, at least so he said. It would be futile profanity to blame what the young intolerant student called "intolerably dull" lectures at Edinburgh University, for the same was true of Cambridge, and that both should have been to blame implies an incredible coincidence!

It was manifestly Darwin who was to blame; he made as little of Cambridge, where he went nominally to become a clergyman, as he made of Edinburgh, where he went nominally to study Medicine. Seriously, however, the fact of the matter is that Darwin was feeling his way towards his life-work as an investigator of nature—as a *Naturforscher*—and the help he could get that was suited to his needs and frame of mind was mostly got incidentally.

Here, it seems to us, we have the main lesson of Darwin's Edinburgh days. He was a youth with a bent, with an idiosyncrasy, with an instinctive desire to get close to the real things of the outer world. With a pertinacity which grew with his years, he steered in the teeth of the wind though he had no clear idea where he was making for. Long afterwards he was wont to say, "It's dogged as does it," and even in his student days he was dogged in keeping up the close contact with nature, into which inheritance and nurture had already brought him. So let us cultivate our garden—our inheritance—and let us not leave it in the hands of others. "Was du ererbt von deinen Vätern hast, erwerb es, um es zu besitzen."

So it was that for two sessions in Edinburgh, Charles Darwin roamed on Arthur's Seat and the Pentlands and the shores of the Forth; made friends with the Newhaven fishermen, and went with them in their boats; attended meetings of the Plinian and Royal Medical Societies, not to speak of the Wernerian (the Royal Physical now) and the Royal Society, where

he once saw Sir Walter Scott in the chair; and got to know interesting people like Dr Robert Grant and Mr William MacGillivray. So it was that he made his first discoveries on the larvæ of the sea-mat and the egg-clusters of the sea-leech, while others were listening to lectures and poring over books. Not that both of these have not their uses! But it is better to have less of both than to lose that *Lernfreiheit* which, once lost, is irrecoverable. It was the guarding of his freshness of mind, as much as the perusal of Humboldt and Herschel, that fitted Darwin to be the naturalist of the "Beagle," which discovered a newer world than that of Columbus. In that new world we live and work.

SIR JAMES Y. SIMPSON BY
SIR A. R. SIMPSON, BART.

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GEORGE DOUGLAS, eighth Duke of Argyll, in his autobiography (John Murray, 1906), telling of some winter months spent in Edinburgh when he put his wife under Sir James Simpson's charge, says (p. 324): "I can hardly, without seeming to exaggerate, convey to others the pleasure which we had both in our personal intercourse with that distinguished man. His enthusiasm was delightful. I do not know that I have ever met any man in whom genius was written more visibly in face, and voice, and manner. His spirit seemed to be always quivering in the presence of Nature, as if conscious of her immense suggestiveness, and trembling lest he should miss even the slightest of her hints. It was most interesting to watch the movements of his expression when he or any one else mentioned in conversation any curious or singular fact—anything unusual or apparently anomalous, however trivial. His spirit seemed always to withdraw into its own recesses, and to be following the trail of some footprint too faint for others to observe, and too slight even for himself to follow to any conclusion. Then it would return from its excursion, breaking into smiles radiant with the hope that an explanation would come at last. . . . His head was enormous like the classical busts of Jupiter. It was covered with a shock of long and thick hair, which fell over his forehead so as often to obscure his eyes. His features, underneath a brow of immense breadth, were small

and refined—a finely curved nose, sagacious eyes, with a smile of great kindness and benevolence, and most movable and expressive lips. When one had got to know it and to see it working in thought and in expression, it was a most noble and spiritual countenance."

Again the Duke says (p. 357): "There have been only four men whom I have come across in life who have had the enormous brain-case which was conspicuous in Hugh Miller. One was Dr Thomas Chalmers, another was Sir James Simpson, the third was Hugh Miller, and the fourth was Professor Whewell, Master of Trinity and author of the 'History of the Inductive Sciences.' These were all men of more than what we call ability—they were all men of genius. With such a brain nothing is impossible, provided only it be furnished with a very few simple tools."

It was in 1825, as a boy of fourteen, that the James Simpson, of whom in after-days the Duke of Argyll was to say these things, matriculated in the University of Edinburgh. He came from the parish school of Bathgate to spend the first two years of his undergraduate career in attendance on Arts classes. In 1825-26 he attended the Junior Greek and Humanity classes under Professors Dunbar and Pillans. The following session he attended their senior classes and the first Mathematical class under Professor Wallace.

In the session of 1827-28 he enrolled as a medical student to study Chemistry and Anatomy, keeping on with Greek, however, in the third Greek class, and attending also the classes of Natural Philosophy and

Moral Philosophy.

It was through the love and self-denial of the older members of a family in which he was the youngest, that the bright boy of the home was enabled to enjoy the benefits of a University career. He was encouraged by winning at the commencement of his second session the Stewart Bursary, which yielded him £10 a year for three years, and for which he competed by the advice of Professor Pillans.

John Reid, who afterwards became famous from his investigation into the functions of the eighth pair of nerves, and occupied for some years the Chair of Medicine in the University of St Andrews, was also a Bathgate bairn.

He was two years older than Simpson, and had already passed two years at the Arts classes, and was just beginning his medical career when he was joined by his younger townsman, who paid three shillings a week for the rent of a room in the upper flat of the tall tenement, No. 1 Adam Street. There they lodged with Dr Macarthur, who had been assistant master in the Bathgate Parish School, and afterwards obtained a situation in one of the Edinburgh public schools. Their mentor was himself a strenuous worker, and stimulated to the utmost the energies of the lads. He wrote during James's first session to his brother Alexander, "I can now do with four hours' sleep, John Reid can do with six, but I have not been able to break in James yet."

Mindful of the *res angusta domi*, one of the first pur-

chases James made on his arrival in Edinburgh was of a small ninepenny book on "The Economy of Human Life," from which he copied the following motto in his little cash-book, "Let not thy recreations be expensive, lest the pain of purchasing them exceed the pleasure thou hast in their enjoyment." That cash-book had sometimes curious entries. Under one date stand "Munro's Anatomy, shoes mending, stakes and stock." Under others, "Vegetables and Byron's Beauties;" "Finnen Hadies, 2d., and Bones of the Leg, £1. 1s.;" "Subject, £2, Spoon, 6d., and Bread and Tart, 1s. 8d.;" "Duncan's Therapeutics, 9d.;" "Snuff, 1½d.," and "Early Rising, 9½d." "The snuff, and the book on early rising," says his biographer, "show how anxious he was to walk up to Dr Macarthur's advice —'Sit late and rise betimes.'"

How diligently he took notes, and how frequently he interspersed these with *queries*, except in the case of Liston's lectures: how he was led to study Medicine: how, horrified by the shrieks and groans of a poor woman undergoing excision of the mamma, he rushed from the Infirmary to the Parliament House with some thought of taking to law, but returned to consider, for the rest of his days, how human suffering could be relieved, essaying the practice of hypnotism and the use of various drugs, till he discovered the anæsthetic property of chloroform, and on till the last time he had a pen in his hand on his sick-bed when, writing of anæsthetic agents, he said, "In all likelihood some will yet be discovered of types super-

ior to any we yet know": how (to revert to his undergraduate career) he qualified as a surgeon at the age of nineteen, and failing to obtain the appointment of parish doctor at Inverkip, he continued his studies until he earned the degree of M.D. in 1832, with a thesis *De causâ mortis in quibusdam inflammationibus proximâ*, which led the Professor of Pathology to offer him the position of Assistant at £50 a year—for all this and much else that is of interest in the undergraduate career of Sir James Young Simpson, I must refer the student to his "Memoir" by Professor Duns, for I have already exceeded the space assigned me by the Editor.

"The following supplementary sentences are from the pen of Professor Sir Henry D. Littlejohn, M.D., LL.D.:—"In the course of a long life I have been privileged to meet many of those distinguished in literature, science, and in my own profession of medicine; but only once in my life have I felt that magnetic something which tells one that he is in the company of a great man. Contact with Sir James Simpson as a professor, consultant, or friend invariably quickened one's thought, and even his casual remarks (like those of John Hunter) on any department of medical science opened up lines of investigation fresh and invigorating. I was often struck by his pregnant remarks on questions affecting public health; indeed, on any topic he was *facile princeps*, and even in the company of artists and literary men of the highest reputation he held his

own. Indeed, in every stage of his career he was equal to the occasion, and no one could have guessed that he was not to the manner born. I was witness in Paris to the marked effect of his presence and talk on men like Dubois, Pajot, Jobert, and Depaul. It may be truly said of him. *Nihil tetigit quod non ornavit.*"

DOCTOR JOHN BROWN

BY A. CRUM BROWN

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JOHN BROWN was born on the 22nd September 1810, in the Secession Manse, Biggar. His father was minister in Biggar from 1806 to 1822, when he accepted a call to the Secession Church, Rose Street, Edinburgh. This involved the migration of the family, and John now went to school. His education had been, during the Biggar time, wholly in the hands of his father, and mainly on classical lines. In the Rector's class in the High School he was able to compete successfully with boys of his own age, and took a high place in the class. For one winter he attended some classes in the Faculty of Arts, and then began the study of Medicine. He was apprenticed, in accordance with the usage of the time, to a member of the medical profession, and, fortunately for him, his master was Mr James Syme, afterwards Professor of Clinical Surgery, not only of the highest eminence as a surgeon, but specially fitted to influence for good such a young man as John Brown, who always regarded his master with the utmost veneration and affection.

I have not often heard him speak of his work as a student, but I know that he was thoroughly up in Anatomy, and that he knew every wild plant in the country, and could tell where all the rare ones were to be found.

Although I cannot tell from his own evidence how he worked as a student, I know how he worked afterwards, and I suppose that was the way he had always

from the earliest time worked. He was intensely interested in many things, especially in things of nature, in plants, in animals—we all know his interest in dogs, not in dogs in general, but in individual dogs—and so he was interested not in *man* in general, but in individual human beings: everything that he was interested in he watched and observed with minute care, and with the most perfect accuracy. And the things he so observed fixed themselves in his memory. I do not think he ever committed anything to memory, but he placed himself in a receptive attitude, and allowed knowledge and an intelligent perception of things to flow into him. Knowledge acquired in this way became, so to speak, a part of himself. Though he did not deliberately commit things to memory, he had thus a great store of favourite passages from authors, ancient and modern, with which he could regale himself at any time. What he had seen or done also lived in his memory; everything, indeed, which had really interested him. He never took elaborate notes. Writing to his brother William about his class work he says: "Take a notebook, do not take anything but the heads of lectures; pay great attention to Hope's lectures on heat; try and get Leslie and read some of it, if possible all the parts where he describes apparatus; he has a great talent in that way." And in another letter: "I am glad to see that you continue to study; give your whole soul to it, and you will not only have no agonising regrets of wasted time, but you will find everything easy, plain, and open." He

did not often write in this didactic style, but I have quoted these passages, written when he was twenty-one years of age to his brother who was sixteen, as showing his ideas as to study.

One thing we must keep in mind, if we are to understand him, is that he was essentially a medical man. Not only was his profession his business and his duty, but he really *devoted* himself to it. His literary work was quite strictly done in spare hours—"Horæ Subsecivæ." Some who knew him only from his writings thought that he was primarily a literary man, and only a doctor by accident. This was not at all the case. Indeed, I do not think he could have made literature his profession. He was like the farmer in the parable; the seed sprang up and grew, he knew not how, but when the fruit was brought forth, immediately he put in the sickle. He could not write to order; the thing had to lie in his mind, and be looked at at odd times with no definite thought of writing, but when it was ripe he wrote it straight away, very seldom making any change on the first draft. This limitation of his powers did not as a rule trouble him, for he very seldom wished to write to order.

Before he graduated as M.D., he spent two years as assistant to Dr Martin, of Chatham, and much interesting information as to medical practice in England at that time (1831) can be got from the letters he wrote home to his father, and to his brother and sister.

He became a Fellow of the Royal College of Physicians of Edinburgh in 1847. In 1874 the University

of Edinburgh conferred on him the degree of LL.D. He was appointed Assessor in the University Court by Mr Gladstone during his double term of office as Lord Rector. He tried to retire from practice in 1876, and did succeed in greatly diminishing his work, but some of his old friends would not let him go. He died of pneumonia on the 8th May 1882, after an illness of about a week.

In conclusion I shall quote from a notice which I wrote for the *Edinburgh Medical Journal* for June 1882: "In private life Dr Brown was one of the most lovable of men. There was a charm in his manner and conversation which is quite indescribable, and there was also a singular balance in all his faculties, which precluded extremes, and never suffered degeneration into corrupt forms. He had humour in a very high degree, but it never for a moment merged into buffoonery. He had sense and wisdom of a rare kind, but they never became severe or overbearing. He was full of pleasant fancy, but it never interfered with his great practical insight and skill. He held decided views in Theology, in Politics, and in Medicine, but he was, at the same time, perfectly tolerant of views opposed to his own, and ever ready to recognise the importance of diversities in human opinion. He had a remarkably clear insight into character, but though the weaknesses, follies, or vices of those with whom he came in contact seldom escaped him, he never seemed to be touched by any sourness towards his fellow-men. The only things of which he was im-

patient were pretentiousness, quackery, or falseness. Above all, he never showed any vanity, and while always ready to recognise good in others, he was very diffident of himself, forbearing and humble. He was a sincere and devout Christian. His religion was not a thing that could be put off or on, or be mislaid or lost; it was *in* him, and he could no more leave it behind than he could leave his body behind. It was in him a well of living water, not for himself so much as for all around him. He very seldom spoke expressly of religion. He held 'that the greater and the better —the inner part of a man is, and should be, private.' But he could not speak of anything without manifesting what manner of man he was, and his ideas on religion can be, imperfectly no doubt, but so far truly, gathered from his writings."

PROFESSOR JOHN GOODSIR
BY SIR WILLIAM TURNER

PROFESSOR JOHN GOODSIR

BY SIR WILLIAM TURNER

IN the Cemetery of the Dean, obelisks in close proximity to each other, stand at the heads of the graves of three men who filled chairs in the University in the middle years of the last century. On one is inscribed John Goodsir, Anatomist; on another to the right, Edward Forbes, Naturalist; whilst that to the left marks the resting-place of John Hughes Bennett, Pathologist and Clinical Teacher. These men were friends and co-temporaries as students and professors, and each in his own department was a man of mark, who contributed to the renown of the University.

John Goodsir was born at Anstruther, Fife, in 1814, in which county his father and grandfather were much respected practitioners of Medicine. When little more than a boy he became a student in Arts in the University of St Andrews. He was then apprenticed to Robert Nasmyth, F.R.C.S.E., the leading dentist in Edinburgh, and at the same time he attended classes both in the University and extra-mural medical school. On obtaining the license of the Royal College of Surgeons, he returned to Anstruther to assist his father in practice. The position of his native town on the sea-coast gave him ample opportunities for the study of marine zoology, which he pursued with great zest along with Edward Forbes, and either independently or in conjunction with him added to our knowledge of the fauna of the Forth. As a student of Robert Knox he became impressed

with the morphological aspects of anatomical science. His apprenticeship to Nasmyth led him to investigate the development and structure of the teeth. Though working only with a simple lens, he published in 1839 an important memoir, in which he gave the first consistent account of the stages of their development, and at once acquired a reputation as an acute observer and interpreter of developmental processes.

Whilst in practice in Anstruther he worked at Pathology, and from the material which he then collected he was able to form a Museum, and to publish in 1842 an important paper on the changes induced by enteric fever in the intestinal glands of Peyer.

In 1841 Goodsir was appointed Conservator of the Museum of the Royal College of Surgeons, Edinburgh, an office which enabled him to devote his time to anatomical study. The improvements in the construction of the compound achromatic microscope had placed at that time in the hands of observers a potent instrument of research. Schleiden and Schwann had formulated the doctrine that there is one universal principle of development for the elementary part of organisms, both plants and animals, and that this principle is the formation of cells. Goodsir applied himself, along with the younger school of anatomists in Great Britain and the Continent, to the investigation of the minute structure of animals, and produced, in quick succession, a series of memoirs in which he demonstrated the gland cells to be the direct agents in the formation of secretions, that the cell nucleus was the

reproductive organ of the cell, that from it, as from a germinal spot, new cells were formed, that the cell was the centre or mother of all those within its own territory or department, and that cells were important agents in absorption, ulceration, and inflammation. He collected his observations, along with others made by his brother Harry, showed their application to Zoology, Anatomy, and Pathology, and published them in 1845 in a volume entitled "Anatomical and Pathological Observations." These researches established Goodsir's reputation, both as an observer and a thinker, and were received with favour both at home and abroad. In 1843 he was appointed Curator of the Anatomical Museum of the University, and in 1844 Demonstrator of Anatomy to Professor Monro. In 1846 he succeeded Monro in the chair of Anatomy, and threw himself with characteristic energy into raising the anatomical school from the state of decadence into which it had fallen. He held as a fundamental principle that anatomical teaching should be practical, based on observation, and scientific in its aims and method. In addition to the systematic lectures and topographical demonstrations given during the winter, and a summer course of Comparative Anatomy, he enlarged the dissecting room, and along with his demonstrators provided complete instruction in Practical Anatomy, so that the class shortly numbered 400 students. From his own dissections and those of his assistants he placed in the Anatomical Museum a beautiful series of specimens to illustrate

his lectures on Human and Comparative Anatomy, and he also pursued his personal investigations. This combination of work resulted in 1853 in a breakdown in health, with symptoms of locomotor ataxy, so that he had to obtain leave of absence for a year.

On Goodsir's return in the autumn of 1854, he found it necessary to reconstruct his staff of demonstrators, and he asked some of his friends in London to recommend suitable assistants. The writer of this notice was introduced to him at this time, and though a youth fresh from the students' benches in the medical school of St Bartholomew's Hospital, and without any experience or training as a teacher, Goodsir resolved to invite him to become Senior Demonstrator of Anatomy, to take charge of the dissecting-room, and to deliver the daily topographical demonstration in the lecture theatre to a class of more than two hundred students.

Goodsir's personality at this time was very impressive. He was tall and somewhat gaunt in figure. His features were massive, the eyes were deep set, the expression was thoughtful, though not infrequently lit up with a gleam of humour; his gait was tottering from the ataxic condition. His mind retained its full activity, his range of information, derived from reading in several languages and from his own dissections, was extensive, and his philosophic grasp of morphological questions, based on the developmental changes which the parts and organs went through, gave value to his speculations when tested "by the severe

criteria of embryology."

Though hesitating somewhat in speech when lecturing, and though his accent savoured of his native county, he commanded the attention of his class, and aroused their intelligence by his suggestive remarks, he placed his collections and books at the disposal of those who showed an aptitude for research, he encouraged and advised them in their work, he impressed all who were associated with him by his greatness as a teacher, by the simplicity of his character, and his intense conscientiousness in the discharge of his duties, and he gained and retained the respect and affection of the students. The writer of this notice cannot too strongly express his obligations to Goodsir for guidance in study, research, and teaching.

Although his health slowly yet surely weakened by the progress of the disease from which he suffered, the relief which he experienced, by the transference of much of the routine work of the department to the senior demonstrator, enabled him to continue. for several years, to deliver the course of lectures in winter, and also the summer course which was usually on some branch of Comparative Anatomy. In 1862 he lectured on the place of Man in Nature, and expounded his views on the absolute completeness of human structure when compared with the relative completeness of animal structure. He also prepared for publication a series of memoirs on the morphological relations of the nervous system, on the vertebrate head, on the constitution of limbs, on the

anatomy and mechanism of the knee and hip joints, and on other subjects. His writings on these and other departments of Biological Science were collected and published in two volumes in 1868.

As years went on, his mental and bodily powers gradually failed, and he died in April 1867, at the age of fifty-three, in the house at Wardie in which Edward Forbes, the naturalist, the close friend and companion of his early life, had breathed his last. By his death the University lost one of the most original thinkers who had at any time occupied a professorial chair.

JAMES CLERK MAXWELL

BY CARGILL G. KNOTT, D.Sc.

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IN November 1847 two Edinburgh Academy boys, aged sixteen, took their seats on the benches of the mathematical and natural philosophy class rooms of our University. These lads were James Clerk Maxwell and Peter Guthrie Tait. The latter stayed but a year then went to Cambridge, where in due course he became Senior Wrangler and First Smith's Prizeman. Maxwell, however, lingered at Edinburgh for three years, studying all kinds of subjects in the wholly unconventional yet absolutely effective method peculiar to geniuses. Even as a school boy he had written a paper on the geometry of oval curves which was thought worthy of publication in the *Proceedings* of the Royal Society of Edinburgh; and before he proceeded to Cambridge in 1850, he had contributed two other papers of marked originality.

In the year in which they were together in the Natural Philosophy class, Tait had the audacity to enter his name for the highest division, while Maxwell was content with the second division. The students of the three divisions into which Forbes divided the class attended the same lectures, but their home work was different. In the succeeding year, when Tait had flown to Cambridge, Maxwell re-attended Forbes's lectures as a member of the highest division. Now neither Tait in 1848, nor Maxwell in 1849, nor indeed Balfour Stewart a few years earlier, gained the Gold Medal which was awarded to the best student of the highest division. And yet no three greater

names in physical science appear among the alumni of our University. In 1857 Professor Crum Brown gained this medal. One day he was shown the old printed honours lists with the names of the three mighty ones occupying the second place; and after expressing surprise he laughingly remarked, "Well, well, fancy a duffer like me beating Tait and Maxwell!"

Although his main interest was in mathematics and natural philosophy, Maxwell attended Hamilton's lectures on logic and metaphysics, and Wilson's lectures on rhetoric. Of these he found Hamilton the most difficult and stimulating. What he got from Kelland and Forbes was indeed child's play to one who had thought deeply on real problems. He worked according to inclination. As he expressed it in a letter, "there is no time of reading a book better than when you need it, and when you are on the point of finding it out for yourself if you were able." In another letter he thus described Forbes's annual ascent of Arthur's Seat with his students,—"On Saturday, the natural philosophers ran up Arthur's Seat with the barometer. The Professor set it up at the top and let us pant at it till it ran down with drops. He did not set it straight, and made the hill grow fifty feet; but we got it down again."

These three years of desultory yet fruitful mental work were not the best preparation for a man entering the lists of the Wrangler race at Cambridge. As Tait put it in his obituary notice of Maxwell: "he brought to Cambridge in the autumn of 1850 a mass

of knowledge which was really immense for so young a man, but in a state of disorder appalling to his methodical private tutor . . . no high wrangler of recent years ever entered the Senate House more imperfectly trained to produce 'paying' work than did Clerk Maxwell." Yet in 1854 he came out Second Wrangler and First Smith's Prizeman.

Relieved from the irksomeness of reading for examinations, Maxwell returned to his original studies in optics and dynamics, and ere long in electricity. His great genius was early recognised by those best fitted to form an opinion; and now the name of Maxwell is as intimately associated with the most profound theories of electricity as is the name of Newton with the law of gravitation or that of Archimedes with the principles of hydrostatics. Maxwell's electrical theory of light was a brilliant conception, which received remarkable confirmation through the experiments of Hertz. These in their turn led inevitably to the invention of wireless telegraphy. To make non-luminous electric waves visible, all that was needed was the invention of an "electric eye." This Hertz provided; and now Maxwell's electric waves carry messages through thousands of miles across the wave-tossed ocean.

Clerk Maxwell was gifted with a splendid memory, and a fund of exquisite humour. In his correspondence with his intimate friends this flashes out in most unexpected ways with quaint allusions to both classical and English literature, of which he had a wide

and deep knowledge. His letters to Tait, written usually with immediate reference to scientific problems, abound in humorous touches, interspersed with mysterious Delphic utterances which only the initiated in mathematical and physical science can construe. Some of the jokes indeed are incomprehensible without the counterpart of Tait's letters which called them forth.

Maxwell also possessed a faculty for clever rhyming, which he frequently used to give point to the delicate sarcasm with which he exposed the hollow arguments of certain *soi-disant* scientific intellectuals. A selection of his scientific verses is given at the end of "The Life" written by Professor Lewis Campbell, of St Andrews University, his friend from early Academy days. The most perfect of these are probably the Tyndallic Ode, dedicated to Tait, the "Notes" of Tyndall's presidential address to the British Association in 1874, and the "Report" on Tait's Lecture on Force before the British Association in 1876. Peculiarly happy also is the galvanometer poem, "The Lamplight falls on blackened walls," an almost perfect parody of Tennyson's song in The Princess, "Blow, bugle, blow."

The first scribbled drafts of these scientific poems were usually sent to Tait, who with the faithfulness of an Achates preserved every fragment of a letter or postcard which he received from Maxwell. These began "Dear T'" and were signed by the mathematical expression $\frac{dp}{dt}$, which in the early symbolism of

thermodynamics was put equal to the product of the three quantities JCM, a combination which spelt out Maxwell's own initials. For much that is curious and instructive in the correspondence of these two friends the reader may be referred to "The Life and Scientific Work of P. G. Tait."

In the pages of Lewis Campbell's beautiful biography we can trace the growth of genius in the quaint boy investigating the "go of things" on his father's estate in Dumfriesshire and then passing through the classes of the Academy to the atmosphere of our University, where unhampered by degree examinations he could browse at will in all fields of mental activity. At school, where he was known as "Dafty Maxwell," he was always busying himself with things in a way which did not appeal to the normal boy. But before he passed from the discipline of the school room his brilliancy and originality were recognised by all. Yet how few could have dreamed that long before the end of the nineteenth century Maxwell would be enshrined among the immortals. In creative genius he ranks with the greatest.

ROBERT LOUIS STEVENSON
BY REV. JOHN KELMAN, D.D.

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THERE is no question that the initials R.L.S. grow dearer with the years, and endear themselves to an ever-increasing number of people. For this love there are many reasons, but for the gradualness of its unfolding there is one above all others. That is the subtlety of his nature, which has appeared before the public in so very many diverse and even contradictory parts, always seeming frankly to reveal itself, yet never quite giving its secret away. Only time can declare such secrets of personality, and, bringing back the tumbled and incongruous individual elements to proportion, show the real meaning of the character. It is not so much the books that have been written about him that have done this for us, but rather the fuller and longer acquaintance with his own writings, whose real centre and characteristic quality have been slow to declare themselves.

His college days at Edinburgh were, from the strictly academic point of view, notoriously a failure. It is no wonder that he did not take a degree, and it is a very great wonder that he obtained certificates of attendance. He sums up his recollections of the Natural Philosophy Class in the statement that "the spinning of a top is a case of kinetic stability," and declares that "no one ever played the truant with more deliberate care," for he "acted upon an extensive and highly rational system of truantry, which cost him a great deal of trouble to put in exercise." Even in the

"Spec."—that famous Speculative Society in which his genius had freest opportunity for play—he can hardly be said to have found his sphere. He was by no means a universal favourite there, and he ends his 1873 valedictory address to the society with the note: "Mr Stevenson engaged in explaining to the other members that he is the cleverest person of his age and weight between this and California."

Clearly the Old Quadrangle can hardly have been his predestined arena. It was not that he disliked work, for no one has toiled more arduously than he did, both in acquiring and in practising the art of letters. It was not merely his delight in freedom and his objection to any kind of conventional restraint. The truth would seem to be that simplicity is the key to success at college. Those big, gracious, athletic men, who are troubled with no problems of the inner life, and who are as unconscious of emotional entanglements as the laughing Herakles in his primitive, generous, and helpful strength—these men are in their native land here. And so are those others, hungry for knowledge or a medal, or with unswerving eyes set on a well-defined career—simple as others in mind, virgin in heart, and able to say truly, "This one thing I do."

But he was of that untoward race who must always be doing many things, with heart and imagination, with intellect and speech, with hands and feet. Sensitive almost to the point of weakness, he yet was free from that callousness to the feeling of others which

often goes with highly self-conscious natures. Dissolved in vain regrets and morbid broodings, he yet retained the power and the will to shake himself free, and plunge into the bright activities of the world. No study, nor any friendship or action, ever satisfied him in itself. Not until he had caught its possible romance and turned its plain story into a fine tale, or its drudgery into a game, had he any use for his human life at all.

Sometimes one wonders how he would get on if he were back in the old place now. So far as the classes are concerned, there is no likelihood that the new possibilities of alternative study would have improved matters. It was not this class or that that bored him, but the fact that they were classes of any kind. In the new developments of the student life of the University, he would probably have tried to find a place, but it is very doubtful if either the S.R.C. or the Union would have held him long. He would have proposed the torch-bearer on the dome for the president of the one, and insisted that the meetings of the other should be held in a balloon or a diving bell. Even if he had been strong enough physically for the Athletic Club, he would probably have wanted to play Rugby in the dress of the French Revolution or the Scottish rising of the '45.

In the case of so thorough-going a Romantic as he always was, you can generally find some predominant and essential complexity, some collocation of opposites near the heart of him, which explains all. With

Stevenson that double personality is very evident, and the *Jekyll* and *Hyde* story is but the most strongly drawn of many such portraitures in his works. It would seem to be expressed most exactly in the combination in him of the aged man and the little child. When Gareth struck the Black Knight Death upon the casque, and the sword split the steel and bone, there came forth a rosy boy, laughing and dancing out upon the world. That dark knight is to the manner born for R. L. S. Gloomy and sombre to the last verge of the depressing, are many of his views of life, or (like the description of man in *Pulvis et Umbra*) monstrous and affrighting in their realism. Yet suddenly he sets the bugles blowing at the very gates of the charnel house, and there is the wholesome march of strong men and the patter of baby feet in clear sunlight. It is typical of the main thing he did, the sending forth of that Gospel of the Healthy Mind, of which Professor William James has been so able an expositor, in an age when decadence was fashionable among clever men.

Nowhere is this more apparent than in his dealings with the technicalities of the writer's art. Every one must have been struck with a certain stateliness of diction, a delight in solemnity as of a priest ministering among sacred things, which sometimes produces the effect of the tolling of bells as you read his sentences with an ear on the alert for sounds. Yet suddenly and constantly the child's play comes in again. Words are but blocks in a cunningly contrived box

of toys, or signals in a mimic warfare. "Bright is the ring of words," he cries, and in the midst of all his aged discoursing, there he is at his game again.

For the serious business of letters, and for the still more serious business of life, he has taught us the curious secret that a man need never escape from his infancy. He may be old and young at once—very old in diction, grey with sombre moods, and bowed down beneath a heavy weight of cares,—and yet have his heart open to the dancing leaves or the tumbling waters, and ready for a frolic on the grass. It is a secret worth learning. Why should we ever grow up at all? At least why should we not all manage to keep some part of our spirit reserved for a children's playground to the end?