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THE LIFE OF
SIR WILLIAM OSLER

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SIR WILLIAM OSLER

BY

HARVEY CUSHING

VOL. I

'Thus there are two books from whence I collect my divinity: besides that written one of God, another of his servant nature, that universal and public manuscript, that lies expanded unto the eyes of all; those that never saw him in the one, have discovered him in the other.'

Religio Medici.

OXFORD
AT THE CLARENDON PRESS

1924

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ITALIC
CAPS
WILL
SOON
INITIAL
CAPS

TO AMERICAN MEDICAL STUDENTS

*In the hope that something of Osler's spirit
may be conveyed to those of a generation that
has not known him, and lest it be forgotten
who it was that made it possible for them
to work in the wards, at the bedside.*

1677
1849
28



TO AMERICAN MEDICAL STUDENTS

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BECAUSE of Osler's interest in the history of his profession the effort has been made in these volumes to bring him into proper alignment with that most remarkable period in the annals of Medicine through which he lived and of which he was part.

Those who knew him best will appreciate the difficulties of compiling these present records, which are *mémoires pour servir*. Little pretence is made in them to do much more than let his story so far as possible tell itself through what he puts on paper.

His rare personality, spirit and character stand out in his recovered letters, brief though they are. An appraisal of his professional accomplishments need not at present be attempted. Here are merely the outlines for the final portrait, to be painted out when the colours, lights and shadows come in time to be added—colours and lights chiefly, for only one heavy shadow is cast, just before the end.

The author herewith expresses his deep gratitude to the many whose names occur in the following pages, and to a still larger number whose names do not, yet who have equally lightened his labour of love by innumerable kindnesses.

OXFORD,
August 1924.

PART I
THE CANADIAN PERIOD

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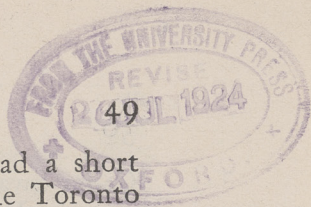
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'Those who have written about him from later impressions than those of which I speak, seem to me to give insufficient prominence to his gaiety. It was his cardinal quality in those early days. A childlike mirth leaped and danced from him; he seemed to skip upon the hills of life. He was simply bubbling with quips and jests; his inherent earnestness or passion about abstract things was incessantly relieved by jocosity; and when he had built one of his intellectual castles in the sand a wave of humour was certain to sweep in and destroy it. I cannot, for the life of me, recall any of his jokes; and written down in cold blood they might not be funny if I did. They were not wit so much as humanity, the many-sided outlook upon life. I am anxious that his laughter-loving mood should not be forgotten, because later on it was partly, but I should think never wholly, quenched.'

Edmund Goss on Robert Louis Stevenson.

Smaller type?

R?



the Institutes of Medicine: but the school had a short life, and though Bovell subsequently joined the Toronto Medical School Faculty, he retained the Chair of Natural Theology in Trinity, where until 1875 he lectured on physiology and pathology.¹ His particular and favourite course was on the subject of 'physiology as related to theological conceptions'!

With his four daughters Bovell lived on Spadina Avenue, and soon after his entrance to Trinity the young Osler began to frequent the place 'to keep the aquaria stocked with pond material likely to contain good specimens of algae', and to gather and study a variety of animals which shortly overflowed to 112 St. Patrick Street after one of the daughters married a Mr. Barwick and moved there to live. Besides this, what engaged him as a first-year student at the university if it was other than what engages most young men, is not recorded, though it is evident that he repaired to Weston as often as week-ends and vacations permitted, in order to go over with 'Father' Johnson the accessions to his zoological collection.

A few classroom note-books of the period have been preserved. One of them starts out bravely, under the date 21/10/67, with '*Latin Prose Composition*', and after the first exercise there is written in the teacher's hand, 'Very good indeed my boy.' But after November the exercises cease to be copied out and the remainder of the book is filled with notes regarding his fresh-water polyzoa: '*Genus I Epithemia*: adherent, quadrilateral; valves circinate furnished with transverse canaliculi, &c., &c.' and there follows a list of elaborately described specimens taken from Humber Bay, Grenadier Pond, the Thames, London [Ontario of course], Desjardin Canal, Burlington Bay, Sandy Cove, together with other genera and species from the same and other places; from the sunken boat in the mouth of the Humber often mentioned in W. A. Johnson's note-book; *Cyclotella Kützingiana* of which there are myriads in the river at London; from the Northern Railway wharf where *Navicula tumida* are common; from the Don River,

¹ Cf. Arthur Jukes Johnson on 'The Founder of the Medical Faculty'. *Trinity University Review*, Jubilee No., June-July, 1902, p. 104.

Cedar Swamp, Weston; and finally from Buckley's water-trough, Dundas, which evidently found him at home for Christmas.

It was Johnson's custom to read aloud to the boys in the parsonage, and for this purpose, as Osler recalled in later years, he often selected extracts from such works as the 'Religio Medici' 'in illustration of the beauty of the English language'. But it must have been more than this. That a high-churchman should have cared particularly for Sir Thomas Browne is remarkable enough, but that he should have been able to transmit this appreciation to a boy of seventeen is truly amazing. It moreover is an important thread which from this point weaves its way through Osler's story to the end; and the 1862 edition of the 'Religio', his second book purchase¹ to which he referred more than once in his published addresses, was the very volume which lay on his coffin fifty-two years later. In Osler's library alongside this particular book, handsomely rebound and evidently much read despite the few marks it contains, there always stood another volume in its original covers entitled 'Varia: Readings from Rare Books', by J. Hain Friswell, London, 1866, which is inscribed in his elder brother's hand: 'Wm Osler from F. O. Xmas 1867.' One of the best of the charming essays this volume contains is upon Sir Thomas Browne, and one may imagine a young man destined for the ministry reading during his Christmas holidays about 'The Religion of a Physician', and how few people there are who know its author, mistaking him either for the facetious writer of 'Laconics' or the Tom Brown of Mr. Hughes's imagination; how he came to practise in Norwich and to write his books; how 'Sir Thomas grew pleasantly old, and died as we have seen, boldly and manfully when his time came'; how he came to be buried there in St. Peter Mancroft in 1682; how in 1840 his grave was despoiled

¹ Osler has given the date of this purchase as 1867, but there are reasons to believe that this was a slip of memory. The first book he bought was the Globe Shakespeare which he said was afterwards stolen, and he often invoked 'the curses of Bishop Ernulfus on the son of Belial who took it.' His favourite copy of the 'Religio' was probably purchased in 1868.

and his skull, rescued from private hands, came to adorn the museum of surgery in Norwich, rendering prophetic certain passages in his 'Urn Burial'.

It must have been shortly after this Christmas vacation that the 1862 Ticknor and Fields (second) edition of the Completed Works, dedicated to the authors of 'The Autocrat of the Breakfast Table' and of 'Rab and his Friends', was purchased at W. C. Chitwell's bookstore in Toronto. There is written, at least, on the fly-leaf 'W. Osler. Coll. S.S. Trin. Lent Term 28/2/'68'. In the book itself there are but three marked passages.¹ Few marks were needed, for only one other book, the Bible, did he come to know more nearly by heart. One note is dated Dec. 6, 1919, and will come later in this story. Two passages of the 'Religio' are marked by stars—one of them the paragraph (p. 10) beginning 'Holy-water and crucifix deceive not my judgement . . .', the other the great paragraph with which the essay opens:

For my religion, though there be several circumstances that might persuade the world I have none at all, as the general scandal of my profession, the natural course of my studies, the indifference of my behaviour and discourse in matters of religion, neither violently defending one, nor with that common ardour and contention opposing another; yet in despite hereof I dare, without usurpation, assume the honourable style of a Christian.

The spring term of 1868 passed by without any definite decision as to his future though there are abundant straws to indicate the direction in which he was tending. Early in the year he had written his cousin Jennette: 'I attend the Medical School every afternoon and I have been grinding at Lyell's "Principles of Geology" in vacation, hoping to get through it before term begins. I am at Dr. Bovell's every Saturday and we put up preparations for the microscope . . . Mrs. W. was here this morning and told me about a stratum in the mountain which was full of fossils; but for the deep snow I would go up and get

¹ There are one or two corrections. Thus on p. 317 of 'Urn Burial' where Browne says 'Plato's historian of the other world lies twelve days uncorrupted', &c., W. O. has changed 'twelve' to 'ten', with marginal reference to the 'Republic' Bk. X.

some for I have none from Dundas and they are difficult to find.' Moreover he had begun to make a collection of entozoa, the earliest entry in the list bearing the date 'Feb'y 7th, 1868', and on these matters he probably consulted Father Johnson, doubtless taking advantage of these Weston visits to engage in the school sports. As Mr. E. Douglas Armour of Toronto recalls :

He had left school in the summer of 1867, and I went there in the autumn term. When the cricket season opened in 1868, he used to come out to Weston where the school was then situate, to play cricket with us, and that was when I first saw him. He was a lithe, swarthy, athletic, keen-eyed boy. I don't think I ever saw anyone with such piercing black eyes. He deserved the encomium bestowed by Horace on Lycus in Book I, Ode xxxii, both for his jet-black hair and beautiful black eyes. He had a peculiar forward inclination of the body as he walked, which caused his arms to hang slightly forward and gave them an appearance of being always ready to use. He was an excellent round-arm bowler, and a batter became distinctly conscious of the strength of the lithe arm, which seemed to acquire a great part of it from his determined and piercing glance as he delivered the ball. You may think it strange that I should enlarge upon this, but the fact that it is as distinctly impressed upon my mind after a lapse of fifty-three years as if I had seen it yesterday will indicate the strong personality that a boy of eighteen or nineteen possessed.

Whether his college standing suffered because of these pastimes does not appear ; probably not, for he acquired knowledge readily. The examination papers of the next June are preserved, and very stiff examinations they were, held on successive days in *Algebra*, *Euclid*, *Greek* (Medea and Hippolytus), the *Catechism*, *Trigonometry*, *Latin Prose*, *Roman History*, *Pass Latin* (Terence), *Classics* (Honours). How he got through the trigonometry with his dislike for mathematics is difficult to conceive. And certainly the Catechism test was searching enough without the enchantment of the polyzoa to have affected his choice of a career. There were eighteen questions, such as these :

Show that the Holy Spirit is both a person and divine.

Eternal life is distinguished as being initial, partial, and perfectional. Explain and illustrate under each head from Scripture.

It is difficult for those of a later generation to imagine

the struggle and turmoil which in those days engaged men's minds. Following Cuvier and Owen, the doctrines and theories of Lyell, Darwin, Wallace, and Huxley threatened to split the very Church asunder. Some, like Wilberforce in the Church, attacked them; some, like Gosse in science, did likewise, and one may imagine, it being but nine years since 'The Origin of Species', that in discussion with his favourite pupil Johnson faced the controversy fearlessly, and that his attitude was not an ambiguous one. In those days, moreover, it was still expected that the Anglican Church would absorb one at least of a family of children, but the youth of the day were graduating from Butler's 'Analogy', which failed to satisfy them as it had satisfied Newman. Subjects more appetizing than theological revelation they were eagerly lapping up in an anonymous volume, 'Vestiges of Creation', in Lyell's 'Antiquity of Man', in Herbert Spencer's 'First Principles' and in Huxley's 'Lay Sermons and Addresses' which appeared anti-theological to a degree.

The Toronto Medical School

The summer of 1868 evidently was passed in gathering further samples of algae from the waterways in and about Dundas. Concerning one of these specimens—a mass of *Pectinatella* found in an old submerged barge near the mouth of the Humber—he consulted his botany teacher, father of the Rev. Thomas Hincks, F.R.S., the authority on the British polyzoa into whose hands this rare finding seems thereby to have fallen.¹ He returned to Trinity for his second year in Arts, but after enduring it for a few days announced to his parents and to the Provost his determination to go into Medicine. He had come to learn his own mind and it appears to have been the only momentous decision of his life—and there were many to make—over which he long wavered. It must have caused some disappointment at home, but if so his parents were not of a sort to bring undue pressure to bear in influencing the

¹ Cf. foot-note to Osler's 'Canadian Fresh-water Polyzoa'. *Canadian Naturalist*, 1883, new series, x, 406.

choice of a career for one of their sons. Even had they been so inclined, Johnson and Bovell unconsciously drew him in another direction. Another environment, an earlier decade, would almost certainly have seen him enter the Church.

And what of his friends and preceptors? Johnson had left the Army for the Church. His two sons chose for Medicine, though one of them subsequently took Holy Orders. And Bovell in a few years came to do likewise; but at this time as soon as he heard of his young friend's decision he exclaimed: 'That's splendid, come along with me.' This the boy literally did, and during the next two years the two lived more like father and son than as teacher and pupil. From the first he evidently entered into his medical studies with the industry and enthusiasm which characterized his relation to his choice of profession to the end. A number of letters from his surviving classmates are unanimous in stating that he was exceptionally studious and faithful in attendance at lectures; that he spent most of his hours in the dissecting-room and when not so engaged was 'always to be found looking through a microscope at Bovell's cells'; that he was a general favourite not only with the class but with their preceptors, of whom Hodder, Richardson, H. H. Wright, and of course Bovell, are chiefly mentioned; and that, when 'grinding' the class, the teachers were apt to turn to Osler when others could not answer their questions. These letters, too, uniformly testify to his companionableness, and state that he was always ready for a frolic and bit of fun.

One of the sports indulged in to a very limited extent was boxing, the champion being big John Standish who could box all day. He had the strength of a giant with a kindly gentle heart and took care never to hurt anyone. The students were amused one day to see little Osler tackle the giant, and quite surprised to find that the little one was almost the only member of the crowd who could strike Standish.

Of Bovell, likewise, many tales survive—tales which emphasize his absentmindedness—of his putting some blisters on a patient and forgetting them until three weeks later; of losing his horse and buggy which were found standing before a house where he had called the previous day. Dr. R. H. Robinson, a fellow-student of Osler's,

writes that on one occasion he felt ill, and having consulted Bovell at the Medical Building, was told to go to bed in his boarding-house, and to remain there until Bovell called the next morning. Bovell forgot about it until the third day and then took Osler with him, to look for the patient somewhere on Grosvenor Street at a number he could not remember. Robinson, who meanwhile had recovered, was out walking and saw Bovell standing in the street in evident distress while Osler was running from door to door inquiring whether there was a sick man in the house.

It is not easy to trace the activities of a medical student of fifty years ago, particularly of one who was habitually reticent about himself, so that even were the letters of the time preserved they would tell little. A visit must have been made to Weston both at the beginning and end of the Christmas recess, for under the dates '19/xii/68' and '9/i/69' Johnson records a number of microscopic specimens such as: 'Trachea of a mouse given me by W. Osler. Gly. beautifully stained.' Inasmuch as there was no course in histology in those days these specimens evidently were prepared on his own initiative by Osler himself; and Johnson in return inscribed to him as a Christmas gift Alpheus Hyatt's 'Observations on Polyzoa, Suborder Phylactolæmata' which had just appeared in the Proceedings of the Essex Institute. Osler's first appearance in print describes an episode of this particular holiday season, possibly under the influence of a morning's perusal of Johnson's present. It was a short sketch entitled 'Christmas and the Microscope' which he sent to a semi-popular and now extinct English journal devoted to nature study.¹ As he said years later, this was the beginning of his inkpot career and showed his 'fondness, even at the very start, for tags of quotations; this one from Horace then a familiar friend.'

Nec iam sustineant onus,
Sylvæ laborantes, geluque
Flumina constiterint acuto,

might well be said of the Canadian woods and streams at this season of the year. The earth has put on her winter robes, and under them

¹ *Hardwicke's Science-Gossip*, Lond., 1870, v. 44 (Feb. I, 1869). Edited by M. C. Cooke.

she hides most of those objects which in summer please and delight us so much. A cheerless prospect for microscopists, one would think. So I thought, as on Christmas I sallied forth with bottles and stick in search of diatoms, infusoria, snow-peas, &c., though I did not expect to be very successful. After wandering about for some time, searching vainly for an unfrozen stream, I was about to return home with empty bottles, when I suddenly bethought myself of an old spring which supplied several families with water, and which I knew therefore would be unfrozen. In this country, wherever there is a good spring some kind individual sinks a barrel for the benefit of the community at large, and thereby benefits microscopists in no small degree, for in these you are generally sure to find a good supply of microscopic objects. When I got to the spring the first thing that greeted my sight was a piece of algae floating on the top of the water, and on a closer examination of the barrel I saw that the sides had a dark-brown coating, in which I knew diatoms and infusoria would be found. Scraping some of this off, I placed it in a bottle and retraced my steps homeward, well satisfied with my afternoon's walk. Getting home at that unfavourable time for working, just as the light is beginning to fail, I had to exercise my patience and wait till evening to see what my bottle contained. I had not long to wait, as darkness soon succeeds the light here; so when I had got a lamp lighted I proceeded to examine my spoils. A short account of the things I found may not be uninteresting to English readers of the *Science-Gossip* as it will give them some idea of what lovers of science meet with in this country. . . .

And the young microscopist of nineteen goes on to enumerate the living 'things' he was able to identify in his bottle of water. Thus his holidays were passed, and the Easter recess likewise found him collecting specimens in the region around Lake Simcoe, a goodly number of which he forwarded to Johnson from Sandy Cove and Kempenfelt Bay; and a week later on his way home, this from a horse-trough:

28/iv/69. Alga? Tindytredia &c. in gathering from a horse-trough on the road and hillside between Hamilton and Dundas, sent me by post from W. Osler to see water bears; did not find any. In Hantz fluid and sealed immediately.

In spare hours during all this first year he and Bovell were doubtless much together, and the latter's granddaughter writes:

He was about twenty in those days and literally lived at our house. He adored Grandfather and the latter loved him like a son—and

they were both crazy about the microscope. Mother [Mrs. Barwick] says her life was a perfect burden to her with weird parcels arriving which might contain a rattlesnake, a few frogs, toads or dormice. She found quite a large snake meandering around the study one afternoon, and when she protested violently, the two told her she should not have been in there. . . .

The summer vacation was largely passed at home and he must have attached himself to the family physician, Dr. A. Holford Walker, for in a paper on appendicitis written twenty years later, shortly after this malady received its baptism, he recalls having seen with Dr. Walker during this year of 1869 two cases in which the abscess had formed and discharged in the groin. But he devoted himself chiefly to his zoological collection, and from time to time forwarded to Weston some new species from Niagara Falls and elsewhere. Not only does 'Father' Johnson's specimen-book duly record their receipt, but it makes clear also that he again joined his disciple in Dundas during September for a series of excursions in and about their favourite hunting-grounds, which evidently supplied the Warden with material for study for some months to come.

Among Osler's several student blank-books that have been preserved is one bearing the date October 1, 1869, which is of no great significance except for one thing. It contains a few pages of notes on chemistry and materia medica (Nov. 3, '69 to Feb. 9, '70), but it is largely filled with the next year's lectures on obstetrics, chemistry, and pathology taken at McGill. In pencil on the fly-leaf in W. O.'s hand is: '*James Bovell, M.D., M.R.C.P. Prof. Nat. Theology in Trinity College Toronto. Lecturer on Institutes of Medicine, Toronto School of Med. Consulting Physician to Toronto General Hospital. Physician to Lying-in Hospital. Lay Secretary to Provincial Synod. Author of Outline of Natural Theology, &c. &c. &c. James Bovell.*' And through the book the name is scribbled whenever a lapse appears to have occurred in the lecture or the student's mind wandered—'*James Bovell M.D. M.R.C.P.?*'; '*James Bovell M.D.*' The man must have come to exercise an extraordinary influence over the boy, and to his last days, as will be seen, in moments of absent-mindedness or

when trying a pen it was the name of James Bovell that came first to paper, not his own.

In those days, before the multitudinous special subdivisions of medicine which have bid fair to crowd the fundamentals out of the curriculum, the course of anatomy extended over two years, and as the dissecting-room represented the only laboratory to which a student had access the abler ones revelled in it. The teachers of the pre-clinical branches, moreover, were at the same time practitioners; and in a lecture on aneurysm¹ delivered years later Osler wrote that:

When a student in Toronto I occasionally visited the jail with our teacher of Anatomy, Dr. J. H. Richardson, and among the prisoners was an old soldier who had been discharged from the army after the Crimean War for aneurysm of the aorta, so his papers said, and, considering the large experience of the army surgeons with the disease, it is not likely there could have been any mistake.²

He goes on to say that the old man died in 1885, thirty years after the Crimean War, and Dr. J. E. Graham gave him the specimen to be drawn and described—a healed saccular aneurysm at the junction of the arch and descending aorta. It is quite likely that these visits with his teacher of anatomy aroused the inquisitive boy's special interest in aneurysm, so evident in his Montreal days; but this is anticipating. As has been stated, the outstanding recollection of him on the part of his surviving fellow-students is that he was always dissecting. Dr. Albert MacDonald, who was prosector in anatomy, recalls that he 'spent more time in the dissecting-room than any other student, frequently bringing his lunch with him in order to get some extra time there. He did much of this work alone, working out problems of his own in his own way, without the aid of a demonstrator. Thus he pointed out the presence of

¹ *International Clinics*, Phila., 1903.

² James Henry Richardson was Professor of Anatomy in the Toronto schools from 1850 to 1902, and for the same period Surgeon to the Toronto Jail. He was a famous rifle-shot and fisherman, and is said to have chosen the maple-leaf as the national emblem of Canada. To Richardson as well as his other teachers in the school Osler paid tribute in his address, 'The Master Word in Medicine' given in 1903, on the occasion of the amalgamation of the Toronto and Trinity Schools of Medicine.

the *Trichina spiralis* in the muscles of one of the bodies, which no one else had observed.' This episode of the winter of 1870 sufficiently illustrates his characteristics, not so much in that it shows unusually acute powers of observation for a student, but rather in giving evidence of his wide-awakeness and his ability to use acquired knowledge, for he had already seen the trichina under the microscope, as is apparent from two sources—from Johnson's specimen-book as well as from a remarkable note-book of this period kept by Osler himself, in which occur lists of entozoa from all possible sources. Of this more will be said in its proper sequence.

Another event, in this first year's study, which had some influence on my later life, was the discovery of the *Trichina spiralis*. Dr. Cobbold has told the story of the several steps leading to the discovery and following it, in his latest work on the Entozoa. My share was the detection of the 'worm' in its capsule; and I may justly ascribe it to the habit of looking-out, and observing, and wishing to find new things, which I had acquired in my previous studies of botany. All the men in the dissecting-rooms, teachers included, 'saw' the little specks in the muscles: but I believe that I alone 'looked-at' them and observed them: no one trained in natural history could have failed to do so.

This paragraph was not written by William Osler, but occurs in the short autobiography of Sir James Paget.¹ The circumstances, however, were much the same, and Osler with his instincts as a naturalist also 'looked-at' as well as 'saw' the specks in his own turn. Literally, thousands of sections were cut and studied; specimens were sent to 'Father' Johnson; Bovell doubtless became interested; innumerable feeding experiments were performed in the attempt to infect other animals, for at the time but little was known of the disease in America. Some six years later, in his first paper on the subject, Osler wrote:

When a student with Prof. Bovell of Toronto I had several opportunities of studying these parasites. In the month of February 1870 while dissecting a subject with Dr. Zimmerman in the Toronto School of Medicine, we discovered numerous trichinae throughout the whole muscular system, all of which were densely encysted, many

¹ The discovery was made in 1835. Cf. 'Memoirs and Letters of Sir James Paget.' Longman & Co., Lond., 1901, p. 95.

having become calcified. From a single drachm of one of the muscles of the arm I obtained 159 cysts, the greater number of which enclosed healthy-looking worms. This man was a German, and had been janitor at the hospital, where I had known him for over two years.¹

It is interesting that he says 'a student with Prof. Bovell', rather than a student at the Toronto Medical School, and it is characteristic also that he links the name of his schoolmate with the discovery, for it is evident from the personal notes accompanying his list of entozoa that it was his own.

This new and consuming interest in the entozoa had been awakened some time before—indeed, when he was still at Trinity, the earliest specimen which he records being under the date '7/ii/68'; but it was not until January 1st of 1870 that he began systematically to make a list of his specimens in a blank-book and to give detailed explanatory notes. It was quite consistent with what was still under way in his study of the Diatomaceae and fresh-water polyzoa, but it illustrates the formative stage of his habit of observing, collecting, recording, and tabulating specimens of cases, and thus preparing material for future publications. Many of the specimens are evidently carried or sent to Johnson, who duly makes such entries as this: '§ 1315. Entozoa from the mucous stomach of a bat, given me by W. Osler and put up by him.' Johnson's interest in this new subject is obviously aroused, though the preparations all appear to have been mounted by his young friend, who is rapidly forging ahead of him. Even when Osler's name is not mentioned, the source of many of Johnson's specimens may be easily traced. Thus:

22/iv/70. § 1388. Parasites on fins, body, &c., of little fish in my aquarium. They seem to have a chitinous horseshoe-shaped piece inside, & are large brown-looking things with powers of locomotion & short cells all round the edges. . . .

Whereas in Osler's records occur three corresponding entries, the first of which reads:

21/iv/70. On the fins of chub in the Rev. W. A. Johnson's

¹ 'Trichina Spiralis.' *Canadian Journal of Medical Science*, May 1876, i. 175.

aquarium were noticed several round white spots. These on examination proved to be some sort of Entozoa. In addition to these, some yellow spots were seen which seem to be a more advanced condition of the parasite. (See slide . . .)

Another entry the following day records the catching of a pike 2 ft. 7 in. long, from which he obtained '68 specimens of *Taenia* and two or three small *Ascaridae*', the microscopical characteristics of which he proceeds to describe in detail. In no sense a Waltonian, as his son came to be, Osler nevertheless could endure fishing when it furnished side-interests of this sort, though it was easier for him on the whole, as his note-book shows, to get his specimens from the fish-market.

There can be little doubt that had William Osler at this time come under the influence of Leidy or Agassiz or possibly of Huxley, he would have gone on with his biological studies and abandoned medicine; for aside from his opportunities in the dissecting-room it would appear that the school was not proving a great success, and his lecture notes, with their 'James Bovell M.R.C.P.' scribblings, would indicate that his mind was not captured by the lectures. There is possibly one thing that might have deterred him, his ineffectiveness with his pencil, for though many of the sketches of his specimens are probably accurate enough they are lacking in any artistic quality—the only accomplishment in which 'Father' Johnson excelled his pupil. However this may be, he persisted in sketching as best he could what he saw under the microscope, and his copious notes with their accompanying illustrations of diatoms, polyzoa, and entozoa are comparable to those accompanying the notes made later on in Montreal and London when he was poring over blood specimens; those made in Philadelphia when absorbed in the malarial parasite; and those made during the first year in Baltimore on the amoebae of dysentery, which practically ended his days with the microscope. The method of the pursuit in each instance was the same, and though occasionally he ventured to reproduce some of his own sketches in his early papers, the art of illustration was not his best card. In all these extra-curricular pursuits, though his name

appears less frequently than that of Johnson, Bovell probably figured largely, for they were much together. Nearly fifty years later Osler wrote :

It has been remarked that for a young man the privilege of browsing in a large and varied library is the best introduction to a general education. My opportunity came in the winter of '69-'70. Having sent his family to the West Indies, Dr. Bovell took consulting rooms in Spadina Avenue not far away from his daughter Mrs. Barwick, with whom he lived. He gave me a bedroom in the house, and my duties were to help to keep appointments—an impossible job!—and to cut sections and prepare specimens. Having catholic and extravagant tastes he had filled the rooms with a choice and varied collection of books. After a review of the work of the day came the long evening for browsing, and that winter [1869-70] gave me a good first-hand acquaintance with the original works of many of the great masters. After fifty years the position in those rooms of special books is fixed in my mind. Morton's 'Crania Americana', Annesley's 'Diseases of India' with the fine plates, the three volumes of Bright, the big folios of Dana, the monographs of Agassiz. Dr. Bovell had a passion for the great physician-naturalists, and it was difficult for him to give a lecture without a reference to John Hunter. The diet was too rich and varied, and contributed possibly to the development of my somewhat 'splintery' and illogical mind; but the experience was valuable and aroused an enduring interest in books. In such a decade of mental tumult as the '60's, really devout students, of whom Dr. Bovell was one, were sore let and hindered, not to say bewildered, in attempts to reconcile Genesis and Geology. It seems scarcely credible, but I heard a long debate on Philip Henry Gosse's (of, to me, blessed memory) 'Omphalos, an Attempt to Untie the Geological Knot'. A dear old parson, Canon Read, stoutly maintained the possibility of the truth of Gosse's view that the strata and the fossils had been created by the Almighty to test our faith! A few years ago, reading 'Father and Son' which appeared anonymously, the mention of this extraordinary 'Omphalos' work revealed the identity and, alas! to my intense regret, the personality of the father as Philip Henry Gosse.

Of this mental struggle the students reaped the benefit—for Dr. Bovell was much more likely to lecture on what was in his mind than on the schedule, and a new monograph on Darwin or a recent controversial pamphlet would occupy the allotted hour. One corner of the library was avoided. With an extraordinary affection for mental and moral philosophy he had collected the works of Locke and Berkeley, Kant and Hegel, Spinoza, and Descartes, as well as those of the moderns. He would joke upon the impossibility of getting me to read any of the works of these men, but at Trinity,

in '67-'68, I attended his lectures on Natural Theology, and he really did get us interested in Cousin and Jouffroy and others of the French School. Three years of association with Dr. Bovell were most helpful. Books and the Man!—the best the human mind has afforded was on his shelves, and in him all that one could desire in a teacher—a clear head and a loving heart. Infected with the Æsculapian spirit he made me realize the truth of those memorable words in the Hippocratic oath, 'I will honour as my father the man who teaches me the Art.'¹

In regard to the 'consulting rooms' referred to in the foregoing, tradition has it that the venture was entered upon at Osler's suggestion, with the object of starting a consulting practice for Bovell and of obliging him thereby to collect his fees. The partnership is said to have continued for about a year, and apparently the business methods, or lack of them, of the senior partner, in the end prevailed. Dr. R. B. Nevitt who entered Trinity as one of Osler's contemporaries, writes that 'he brought there no marked reputation except that he was a good fellow and held the distance record for throwing a cricket-ball'. He says further:

One afternoon I had some engagement with W. O. and called for him at Bovell's office. The room was large and bare with a few chairs and a small deal table—like a kitchen table. Osler opened the drawer of the table—Dr. B. had gone out—and said: 'Look here! This drawer has been filled to overflowing with bills two or three times this afternoon and now look.' One solitary bill lay in the drawer. As the patients paid their fees Osler placed them in the drawer. A needy patient came along, and Dr. B. reversed the process and handed money out so that the sick man might get his medicine and the food and other things required.

Many other stories of Bovell could be told—many of them probably true and many of them having Osler as an appendage. The older man was adored by all the students, though it could never be told whether the topic of his lecture was going to be medical or theological, or indeed whether he would remember to come at all; and on occasions, both at Trinity and the medical school, it devolved upon Osler to give his lecture for him. It was during the spring of 1870, despite all of his accumulating

¹ Introduction to 'Bibliotheca Osleriana' (in the press).

interests, that Osler began visiting the veterinary hospital, possibly drawn there in the first place by his interest in comparative parasitology and in the expectation of adding to his growing collection of entozoa—an expectation fully realized.¹ Nevertheless he found time to prepare for publication the results of his studies on the Diatomaceae and to forward the manuscript to Principal Dawson of McGill, who was at the same time President of the Natural History Society of Montreal.² This, his second appearance in print, Osler introduced with this paragraph:

Among the many beautiful objects which the microscope has revealed to us, none, perhaps, are such general favourites (especially with the younger microscopists) as the Diatomaceae. Their almost universal distribution—the number of species—and above all, the singular beauty and regularity of their markings—have all tended to make them objects of special interest and study. In the following paper I propose to give briefly the principal points connected with their life, history and structure, together with a list of those species I have met with in Canada . . .

The article, as W. T. Councilman has said,³ contains ‘an admirable description of the structure, mode of division, and propagation of the diatom, evidently based on personal observation’. There is mention of a ‘diatom-prism’, which he has been enabled to use through the kindness of Professor Bovell; due acknowledgement of his obligations to the Rev. W. A. Johnson is made; and he proceeds to enumerate 110 species in 31 genera collected from the haunts with which the reader has become familiar—the Don River, the cedar swamp of Weston, the wharves at Toronto, the sunken boat at the mouth of the Humber, Lake Simcoe, the Welland Canal, Coote’s Paradise, the Niagara River, and so on—and he adds: ‘Many more no doubt will be found as the number of practical microscopists increases in the country.’ One or another of these familiar haunts finds him at the close of school adding to

¹ Quite consistent with this were his subsequent associations with the veterinarians at McGill.

² The paper was not presented before the Society until the October meeting, though it was published in the June volume of the Transactions.

³ ‘Some of the Early Medical Work of Sir William Osler.’ Johns Hopkins Hospital Bulletin, July 1919.



the collection of entozoa obtained from a variety of creatures which were hooked, trapped, or shot—including a large male skunk! And later on at Dundas he continues through July, August, and September with this same exciting quest of the parasites in beast, bird, and fish:

13/viii/70. Shot a kingfisher. A few small Diatoms were found in the liver. The small fish which constitute the food of this bird seem not to share in the common fate of fish, inasmuch as few or immature entozoons were found in them, &c., &c.

On other days he shoots a hawk, or hooks a large black bass in Burlington Bay, or examines ten sunfish caught in the canal, and so on—a combination of sport and science, with the chief emphasis on science, to judge from the elaborate notes on his pathological findings and the scant reference to their source. Johnson must have paid another visit to Dundas early in August, for on the 16th he wrote an amusing bread-and-butter letter which Osler had preserved, and a few days later sent the following remarkable note, doubtless believing that the young student of entozoa was capable of an investigation which might have anticipated Theobald Smith:

The Parsonage, Weston, Ont.

To W. O. from Rev. W. A. Johnson.

23 Aug^t 1870.

My dear Osler,—The cows &c. round us are all afflicted & several dying from what appears to be the bite of the little fly that teazes horses so much just now. I went out yesterday & captured 8 or 10 on the fences & sides of an old horse & by the time I got into the house from Holley's field there were 8 small maggots in the clean bit of paper. These were extruded from one of the flies. Question, Is this little fly known to be a vivipositor? If so, are these Maggots adapted to live in the skin of a living animal? The sores on the cows legs bags, &c., would show this. Could not you inspect them. The country would be benefited by knowing, because the papers are writing about a *disease*? Come over & have a look. In the mean time I will drop a line to Bethune & Hincks & find out (if they can tell me) whether said fly is a vivipositor. Yours sincerely

W. A. JOHNSON.

During this summer vacation, if not before, Osler had determined, in all probability on Bovell's advice, to leave

the Toronto School for McGill, for it must have been apparent to both of them that the clinical opportunities in the Montreal hospitals, which were more open to students, far exceeded those which Toronto then offered. Bovell had gone to the West Indies for the summer, and before leaving must have known of his pupil's decision, and have given him a letter to Palmer Howard, then Professor of Medicine at McGill. But at the time Bovell seems to have given no intimation that he himself might not return, and though rumours to this effect had reached Osler during the summer through letters both from Johnson and from his son, Bovell's namesake, the following from Bovell himself made the matter final, and must have reconciled Osler to his own first migration.

To W. O. from James Bovell.

Spring-Well near Charles Town
Nevis West Indies.

August 11th [1870].

My dear Osler,—My last will have given you some general idea of the outline of Nevis and its gorges. This will not add much local news as I am not yet settled and cant yet get myself used to the idea that I may not get back to Canada this year. I now write to beg you to see that all my Microscopical Apparatus is very carefully packed—all the things being taken out of the very large binocular case and made to fit the smaller binocular. All the object glasses carefully put in the cases and a case made for the instrument in the Cabinet—The Specimens looked over and packed. You are to have my surgical instruments and Stethoscopes but send my Clinical Thermometer. I dont want to keep the monster Microscope stand and Eye pieces so if you like to pack carefully all the rest of the apparatus up, you can have as a present the stand and Eye-pieces. I will next mail write you the name of the Merchant at Halifax who ships goods out to this place and if the Express will take the things down to Halifax they can come out here to me—but any thing must be put up and packed in book-binders shavings papers. I am going into the large Star-fishes of which there are many to be had out here and I am watching repair in Lizards and tubercle in Guinea pigs the last are only now breeding so I shall not have enough to begin with before October, but it is an advantage to have them. The Lizards here are very large and I hope for some good results. The [Toronto] School paid very little this year so I am not sorry to leave it although I do care a great deal leaving Richardson and my old friends of years—I cant think of Johnson without a choking for we are brothers of years affection and not even you can know how

deeply I love him. I am however not acting from choice but from necessity and duty. I have made a purchase which if watched and cared will be a fortune to my children and however little I may benefit it is to them every thing that I should be here to see after its development. I hope to be in Toronto in June unless Mrs Barwick comes this way to avoid a Canadian summer. I have not a bit of thin glass to see anything with. The 1/8th was done for by its fall and Gannot could do nothing with it. It got a crack right through it—I do hope you will work on for I have quite made up my mind that you are to get a first Class for the East India Comp^y. Write me all the news and fully—Do look after my Microscopes and see to them—Give my love to your good Father and to all who ask for me. I write you again by next mail—Love for you dear boy. Y^{rs} affect^y

J. BOVELL.

It has been said of Bovell, perhaps by Osler himself,¹ that in spite of his rich mental endowment there was, from attempting too many things, 'a want of that dogged persistency of purpose without which a great work can scarcely be accomplished', and he adds: 'It may be well for a physician to have pursuits outside his profession but it is dangerous to let them become too absorbing.' It was perhaps just as well that Osler at this time was destined to come under the steady influence of a less brilliant personality. Nevertheless, in spite of, or because of, Bovell, it is apparent that in this last year at Toronto Osler laid the foundations of what were to be his subsequent habits of life. The cornerstone of the foundation was work and the finding of this a pleasure. To this were added three qualities, of which he speaks in a later address² to medical students: the Art of Detachment, the Virtue of Method, the Quality of Thoroughness; and to these he adds a fourth as essential to permanence—the Grace of Humility. He commends to them what obviously he had by this time learned himself:

In the first place, acquire early the *Art of Detachment*, by which I mean the faculty of isolating yourselves from the pursuits and pleasures incident to youth. By nature man is the incarnation of idleness, which quality alone, amid the ruined remnants of Edenic

¹ Cf. an unsigned obituary notice in the *Canadian Journal of Medical Science*, 1880, v. 114.

² 'Teacher and Student.' 1893.

characters, remains in all its primitive intensity. Occasionally we do find an individual who takes to toil as others to pleasure, but the majority of us have to wrestle hard with the original Adam, and find it no easy matter to scorn delights and live laborious days. Of special importance is this gift to those of you who reside for the first time in a large city, the many attractions of which offer a serious obstacle to its acquisition. The discipline necessary to secure this art brings in its train habits of self-control and forms a valuable introduction to the sterner realities of life.

Twenty-three years later in an address¹ given in Toronto on the occasion of the amalgamation of the Toronto and the Trinity Schools of Medicine, Osler paid the following 'tribute of filial affection' to the man from whom he was now in this summer of 1870 to become separated :

There are men here to-day who feel as I do about Dr. James Bovell—that he was of those finer spirits, not uncommon in life, touched to finer issues only in a suitable environment. Would the Paul of evolution have been Thomas Henry Huxley had the Senate elected the young naturalist to a chair in this university in 1851? Only men of a certain metal rise superior to their surroundings, and while Dr. Bovell had that all-important combination of boundless ambition with energy and industry, he had that fatal fault of diffuseness, in which even genius is strangled. With a quadrilateral mind, which he kept spinning like a teetotum, one side was never kept uppermost for long at a time. Caught in a storm which shook the scientific world with the publication of the 'Origin of Species', instead of sailing before the wind, even were it with bare poles, he put about and sought a harbour of refuge in writing a work on Natural Theology which you will find on the shelves of second-hand bookshops in a company made respectable at least by the presence of Paley. He was an omnivorous reader and transmuter, he could talk pleasantly, even at times transcendently, upon anything in the science of the day, from protoplasm to evolution; but he lacked concentration and that scientific accuracy which only comes with a long training (sometimes, indeed, never comes) and which is the ballast of the boat. But the bent of his mind was devotional, and, early swept into the Tractarian movement he became an advanced Churchman, a good Anglican Catholic. As he chaffingly remarked one day to his friend the Rev. Mr. Darling, he was like the waterman in 'Pilgrim's Progress', rowing one way, towards Rome, but looking steadfastly in the other direction, towards Lambeth. His 'Steps to the Altar' and his 'Lectures on the Advent' attest the earnestness of his convictions; and later in life, following the example of Linacre,

¹ 'The Master Word in Medicine,' 1903.

he took orders and became another illustration of what Cotton Mather calls the angelical conjunction of medicine with divinity. Then, how well I recall the keen love with which he would engage in metaphysical discussions, and the ardour with which he studied Kant, Hamilton, Reid and Mill. At that day, to the Rev. Prof. Bevan was intrusted the rare privilege of directing the minds of the thinking youths at the Provincial University into proper philosophical channels. It was rumoured that the hungry sheep looked up and were not fed. I thought so at least, for certain of them, led by T. Wesley Mills, came over daily after Dr. Bovell's four o'clock lecture to reason high and long with him

On Providence, Foreknowledge, Will and Fate,
Fixed Fate, Freewill, Foreknowledge absolute.

Yet withal his main business in life was as a physician, much sought after for his skill in diagnosis, and much beloved for his loving heart. . . . When in September 1870 he wrote to me that he did not intend to return from the West Indies I felt that I had lost a father and a friend; but in Robert Palmer Howard, of Montreal, I found a noble step-father, and to these two men, and to my first teacher, the Rev. W. A. Johnson, of Weston, I owe my success in life—if success means getting what you want and being satisfied with it.

CHAPTER IV

THE MCGILL MEDICAL STUDENT, 1870-2

IN a later address¹ Osler gave the following thumbnail account of his two years in the McGill Medical School :

When I began clinical work in 1870, the Montreal General Hospital was an old coccus- and rat-ridden building, but with two valuable assets for the student—much acute disease and a group of keen teachers. Pneumonia, phthisis, sepsis and dysentery were rife. The ‘services’ were not separated, and a man for three months looked after medical and surgical patients, jumbled together in the same wards. The physic of the men who were really surgeons was better than the surgery of the men who were really physicians, which is the best that can be said of a very bad arrangement. . . . Scottish and English methods prevailed, and we had to serve our time as dressers and clerks, and, indeed, in serious cases we very often at night took our share in the nursing. There were four first-rate teachers of medicine on the staff—Howard, Wright, MacCallum and Drake—three of whom had learned at first hand the great language of Graves and of Stokes. The bedside instruction was excellent and the clerking a serious business. I spent the greater part of the summer of 1871 at the hospital, and we had admirable out-patient clinics from Dr. Howard, and a small group worked in the wards under Dr. MacCallum. An excellent plan, copied from an old custom of the *Lancet*, was for the clinical clerk to report the cases of special interest under *Hospital Practice* in the local medical monthly. My first appearance in print is in the *Canadian Medical and Surgical Journal*, reporting cases from Dr. MacCallum’s wards. Our teachers were men in whose busy lives in large general practice the hospital work was a pleasant and a profitable incident. A man like Palmer Howard got all that was possible out of the position, working hard at the hospital, studying the literature, writing excellent papers, and teaching with extraordinary care and accuracy ; naturally such a man exercised a wide influence, lay and medical. I left the old General Hospital with a good deal of practical experience to my credit and with warm friends among the members of the staff.

On his way to Montreal Osler appears to have stopped at Weston, and while there must have been consulted regarding ‘Jimmie’ Johnson’s choice of a career : ‘Father’ Johnson at least sent after him post-haste a letter on the

¹ ‘The Medical Clinic : a Retrospect and a Forecast.’ *British Medical Journal*, Jan. 3, 1914.

subject, though a scoop from the Grenadier Pond was evidently a matter of greater concern at the moment, and 'Jim' must wait. His English cousins, Marian and Jennette, the former now Mrs. Francis, had returned to Canada two years previously, and had settled at Montreal. Featherstone Osler in a letter to his sister Elizabeth in Cornwall mentions that 'Willie has gone to McGill College where the hospital advantages are greater than at Toronto. I wish to give him every advantage in my power though it is very expensive. Chattie went with him for a visit to Marian. She has not been very well lately and we thought a change would do her good.'

Montreal in the '70's and for some years to come had unquestionably the best medical school in Canada, and the opportunities offered to students were possibly rivalled by those in only one city in the States—namely, in Philadelphia. The McGill school, founded by Scotchmen, had from its inception closely followed the educational methods in vogue at Edinburgh, where only the year before, a young man named Joseph Lister had been called from Glasgow to succeed Syme as Professor of Surgery. The school, moreover, was in the process of being moved from its old site on Côté Street to the university grounds, where a new building, whose foundations were laid in 1869, had just been completed. The 'hospital advantages' spoken of by Osler's father were those at the Montreal General, which like the Edinburgh hospitals was in close affiliation with the school, and students were given a degree of freedom in the wards such as existed in no other large hospital on the Continent. In the Upper Canada schools at Toronto and Kingston, on the other hand, traditions of the great London hospitals largely prevailed—traditions in themselves as worthy of emulation as those of Edinburgh, but one only needs to consult the Canadian medical journals of the late '60's and early '70's to learn that in Toronto much dissatisfaction was rife, and that the staff and the trustees of the Toronto General Hospital were at loggerheads over matters relating to medical instruction.¹

¹ In September of 1869 the Canadian Medical Association had met in Toronto, at which time Palmer Howard the Professor of Medicine at McGill

A number of students had already gravitated to Montreal from Toronto, and among those living on Lower St. Urbain Street were six of Osler's particularly intimate friends: 'Charlie' Locke and Clarkson McConkey, former school-mates at Barrie, Thomas Johnson of Sarnia, Keefer later of the Indian Army, Arthur Browne of Montreal, and Harry P. Wright of Ottawa. They were a youthful group, most of them graduating before they were of sufficient age to receive their diplomas, but they were of robust appearance, and this 'St. Urbain clique' came to be known as the 'bearded infants'. Harry Wright, who became Osler's room-mate, is said always to have laughed in later years when Osler's name was mentioned, and one may imagine that his love of innocent fun and addiction to surprising pranks was rampant at this time, though a greater love of serious work was becoming deeply ingrained. These two, Harry Wright and Osler, were taken up by Palmer Howard, and came to be constant visitors in his household, where Sunday dinner always found them.

To judge from Osler's student note-books, Howard must have been a systematic teacher of the old school, one who presented his topic under headings in a way very gratifying to students, '*Zymotic diseases*: due to a specific poison. They have been called miasmatic and the poison which produces them has been called morbid, etc.', and there is a good deal of stress laid on therapeutic measures, all of which sounds rather old-fashioned—this presentation of medicine of fifty years ago. Throughout, the young student is evidently very attentive and has less temptation, or less opportunity perhaps, to scribble his favourite preceptor's

and President of the Association had read two notable reports on preliminary and on professional education in medicine. He had recommended not only a high standard for matriculation with examination requirements, but a four-years' professional course of nine instead of the usual six months and no diploma to be given before the age of twenty-one was attained. It is of interest that Dr. Davis, of Chicago, the founder of the American Medical Association, was present at the meeting and urged the Canadians to adhere to these high standards as the example would be an influence in the establishment of something comparable to them in the States. There was much discussion over these matters which must have reached the ears of the students.

name on the pages, as he comes later to do while taking lecture-notes on mental diseases, medical jurisprudence, materia medica, and chemistry, fragments of which are in these same student volumes.

From W. A. Johnson to W. O.

The Parsonage, St. Philip's,
Weston. 20th Octb 1870.

My dear Osler,—Your kind letter was duly received and gave me much pleasure. I hope your connection with McGill will prove an advantage to you in many ways. The size of the city and its various opportunities may prove of service alone, and the change of ideas together with seeing and knowing different persons ought to be of great service too. Jimmy tried the examination and failed not in things of any importance, but as the examination was suited chiefly for aged school masters and such like [etc.]. . . . I send you by this mail a little bottle which you will easily get at by picking away the corks with your pen knife at both ends and the bottle will drop out. It contains specimens of my stranger. Vaginicola? I suppose but can not find anything in my illustrations like it. The two that are attached, one to a green leaf, the other a dry, were free when I put them into a saucer. No doubt some naturalist will tell you the name. If so let me know. The tentacles are very like those of Hydra. . . . I send you also a copy of Taylor's Holy Living. I have returned to my habit as a boy of reading a few lines of it every morning before going downstairs, and am not a little pleased to see in it the origin of all my religious that is practically religious ideals. It is a little book well worth using as a friend. Its teaching is higher than any High Churchism of the present day and in many things more plainly to the point. Liking Sir T. Browne as you do, you will be pleased with it and I trust and pray it may long be your friend and companion. We have not anything new doing here. The Dr [Bovell] is not likely to return this year. . . . Remember me very kindly to your Sister and tell me who you find in Montreal to talk to about religious or Church matters, as well as scientific. Let me hear from you frequently. It is a sort of duty I would like to exact from you, as well as a great pleasure to me. Hoping it will please God to bless you with health of mind and body and a strong zeal for others welfare believe me Very faithfully yours

W. A. JOHNSON.

The young Osler must have pondered considerably over this letter, for 'James Bovell, M.D., M.R.C.P.' is written meditatively on its margins. 'Father' Johnson, apparently somewhat upset by his son's failure to meet the matriculation requirements, expresses relief at his entering Trinity,

and quickly passes on to more agreeable subjects—to things put up in balsam and glycerine, and to matters of religion. He makes no mention of his own troubles, which must have been acute at this time, for he was in open opposition to his bishop, and the school he had founded was taken away from him in this year of 1870, and moved to its present home at Port Hope. Johnson, alas, was in matters of theology a born controversialist, and it is not unlikely that this may have reacted upon his most famous pupil, for Osler either had a native aversion to, or in some way acquired the happy gift of avoiding, what his first preceptor seemed destined to fall into—controversies. And in the end, as Dr. Garrison says :

What made him, in a very real sense, the ideal physician, the essential humanist of modern medicine, was his wonderful genius for friendship toward all and sundry ; and, consequent upon this trait, his large, cosmopolitan spirit, his power of composing disputes and differences, of making peace upon the high places, of bringing about 'Peace, Unity and Concord' among his professional colleagues. 'Wherever Osler went', says one of his best pupils, 'the charm of his personality brought men together ; for the good in all men he saw, and as friends of Osler, all men met in peace.'¹

But Johnson need have had little worry for his young friend's spiritual welfare at this time, nor lest Taylor's 'Holy Living' be not read like the 'Religio Medici', a few lines a day. For during his medical-school period he was a regular attendant at early service at the then little Chapel of St. John the Evangelist near where he lived, and it was not until several years later that he became a casual church-goer.² One would be interested to know the tenor of his

¹ From the Foreword in 'A Physician's Anthology of English and American Poetry.' Oxford University Press, 1920 Selected and arranged by Casey A. Wood and Fielding H. Garrison.

² His copy of 'Hymns Ancient and Modern' is preserved. On the fly-leaf he has written '*W. Osler, Easter 1871*', and below there follows '*Holy Trinity Toronto. St. John the Evangelist's Montreal. All Saints, Margaret Street, London.*' All Saints is near Portland Place, and while in London in 1872-4 he and Arthur Browne lived not far away in Gower Street. The Rev. Arthur French has sent this note of Osler's relation to St. John's during his student days :

'This "little church round the corner" was greatly valued by many of the Montreal medical men at that time ; it was not only situated near

Christmas letter to Johnson which brought forth this reply :

From W. A. Johnson to W. O.

The Parsonage, Weston, Ont.
25 Decbr 1870.

My dear Osler,—Your very affectionate and thoughtful gift and letter are both at hand. The Photo. is very good, and I am delighted to have it. Montreal has surely agreed with you. I could not ask a greater treat than such a work as 'Preparation for Death' by Alfonso, Bp. of Agatha. The subject is one of all others that I like best : really believing as I do that, 'better is the day of a man's death, than the day of his birth', and it is divided into short meditations just suited to my time early in the morning, when I can generally make 1/2 of an hour before I go down to Chapel. Talking of the Chapel almost everyone feels it is a success. One thing seems pretty clear, that almost any thing would be admitted now in the way of adornment. The cross stands out or peeps through at every arch and every window and we had two vases of flowers on the altar tonight and up at the Church the girls have made crosses between

the old Medical School on Coté Street, and very near the General Hospital, but it was under the spiritual direction of the Rev. Edmund Wood, nephew of Aston Key the once well-known surgeon at Guy's. Mr. Wood had won the affectionate regard of the medical faculty generally, and of the students, by his faithful ministrations to the patients in the hospital, and to the poor who were numerous in the district where the medical students then lived.

'The periods of the lenten season and of the final medical examinations often synchronized, as it did in, I think, the year in which Sir William took his medical degree and greatly distinguished himself. The pressure on the time of this industrious and methodical student did not lessen his regular attendance at the daily service, even at the time, so important to him, of his examination.

'Though with succeeding years there was modification of the manner of showing his appreciation and attachment to "the practice of religion", there were throughout his life signs, though latent, that it always existed. He not only was a personal supporter for a considerable time of the work of St. John's, but to the last it was his custom, in many of his frequent visits to Montreal in later years, to call upon his friend and rector, Mr. Wood. His last visit to him was shortly before the latter's death and was marked by Sir William's suggestion that he should collect a fund, among former colleagues, to erect a memorial in the church to Dr. Wright. The latter had been Professor of Materia Medica at McGill, in both the student and professional days of Sir William, and also subsequently being ordained, joined the staff of clergy of the church. Notwithstanding the death of Mr. Wood, the memorial was erected and stands to-day not only as a mark of appreciation of one who was both his instructor and colleague, but also of the attachment Sir William had to his old friend and rector, Mr. Wood, and also to the church which as a student he was accustomed regularly to attend.'

each window and even unhappy Couron begins to fancy he can permit them and still worship.¹ These little things are an advance to a certain extent, but still it is humiliating to see how little we accomplish. Surely one might expect that at this season of Advent a few would try to examine their ways and seek counsel and advice at the mouth of God's ambassadors. Among the papists there seems to be a general waking up during advent. In the city and here they are thronging daily to confession before Xmas. Possibly they may err greatly in this, but do not we err in totally neglecting it? . . . I am glad you saw Prof^r Dawson. You know all I have of the Polyzoa and anything you want I will gladly draw write or send. Prof^r Hincks hopes to give me the name of that (larva?) with such beautiful tentacles. Shew it to Prof Dawson and see if he knows anything of it. Hoping you may live to be blessed in fulfilling all your hopes and expectations believe me very affectionately yours

W. A. JOHNSON.

These 'hopes and expectations' of which he was writing to Johnson must have concerned an elaboration of his entozoan collection, for preserved with Johnson's epistle is a fragment in Osler's hand, evidently the first draft of a letter to some authority recommended by Principal Dawson. For he says under the date 'Jan'y 4th 1871':

I have been engaged for a short time in the study of entozoa and find great difficulty in getting the species described. On consulting Prof. Dawson as to who would be the most likely person to aid me, he referred me to you. I subjoin a list of those I have met with and the creatures in which they are found; hoping you will be able to either name them or refer me to papers in which they have been described, etc.

J. W. (later Sir William) Dawson, F.R.S., at this time Principal of McGill, was largely responsible, with the financial backing of Sir William MacDonald, for the building up of a real university out of what before 1870 had been little more than a flourishing medical department. Primarily a geologist and a follower of Lyell, he was much interested in the theory of evolution, about which he had his own ideas: 'The egg grows into the animal and the organism produces the egg again. This is revolution, not evolution.' But he was not only Principal: he held the Chair of Botany

¹ Johnson's efforts to adorn his chancel with the customary symbols of the Christian belief had been regarded as popish if not idolatrous by many of his parishioners who on more than one occasion had broken into the church and demolished them.

and Zoology, subjects covered in the primary medical courses, and was at the same time President of the Montreal Natural History Society before which Osler's paper on the Canadian Diatomaceae had been presented on October 31st of 1870. This may have served to draw his favourable attention to the young medical student who had come up from Toronto for his final clinical years; and that he was duly impressed will appear from a later episode. Osler, indeed, had already begun to make his mark in the school, and though doubtless a prejudiced witness, his cousin Jennette writes in January to his mother: 'Willie has shed the light of his countenance upon us this evening. I cannot tell you what a pleasure it is to us to have the dear, merry fellow coming in and out and to look forward to our Sunday treat. We hear his praises on all sides and from those whose good opinion is hard to win and well worth having. He is pronounced "thoroughly reliable", "as good as he is clever", "the most promising student of the year", and finally from a learned professor, slow to praise, "a splendid fellow".'

Despite his prescribed hospital 'clerking' referred to as 'a serious business', Osler not only found time for some outside reading, but as the interview with Principal Dawson showed, was still engaged with his entozoan collection. Specimens were obtained from many sources, as his notes indicate—from the Montreal fish-market, from the Natural History Society through whom he secures a dead lynx for study; '8/3/71. From a rat at Montreal General Hospital I obtained 5 *Taeniae* from low down in intestine—a small fine species with motor vascular system very distinct', etc., etc. Certainly not the usual pursuits of a medical student of the '70's. Whether he never heard from the parasitologist to whom he wrote early in the year, or whether he became so engrossed in the clinical studies, to be his life's chief interest, that his further pursuit of entozoa was necessarily side-tracked, is impossible to tell. For one reason or another he never worked up his collection of specimens for publication, though he always retained a live interest in the subject.¹

¹ His early studies had possibly been stimulated by Casimir Davaine's book (1860) on 'Entozoa in Man and Animals', or more probably by

Occupied as he had been with these extra-curricular studies, the brief Franco-Prussian War of the preceding months, now coming to a settlement, does not appear to have touched very deeply if at all the young student whose medical career spanned the two great European wars of his generation, in the last of which the heart-breaking tragedy of his life was to occur. In the family letters of this time sent to the Cornwall relatives there are, to be sure, occasional references to 'the horrors of war raging', but home news is of greatest interest, and of her son's progress Ellen Osler writes: 'I will send one of Willie's photos as soon as I can get them from Montreal where he is going on in a very satisfactory manner a great favourite with every one, with the leading medical men especially, so I ought to be thankful, indeed I have been very lovingly dealt with in every way all the past years of my life, and only wish I had a more grateful heart.'

Word had come early in the year, that Bovell had decided to take Holy Orders in the West Indies (this despite the rumour that he was one of the organizers of the new Trinity College Medical School just projected), and two days after his ordination, it being Johnson's birthday, he sends this letter which Johnson evidently forwarded to Osler, among whose very scant residue of old letters it has been found:

*Rev. W. A. Johnson from James Bovell. Clare-Hall, St. John's,
Antigua, W. I.
June 27th 1871.*

My dear Johnson,—As you may fancy my thoughts to-day went by telegraph to Weston, and I am spending a deal of time in the old arm chair with you. The worst part of the business is, that although you are visible to me, you are as dumb and silent as ghosts who come to earth. The paper cutter is in your hand and the Church Times is being opened and you are grumbling about Bennett

Thomas Spencer Cobbold's 'Entozoa' (1864). He probably did not know Rudolph Leuckart's 'Die Parasiten', recently translated (1867), though it was with Leuckart that he subsequently studied in Leipzig. Chiefly through his active support a special course in parasitology was given to the Johns Hopkins students during his period there, and years later he was instrumental in securing for McGill a professorship in Parasitology whose first incumbent was Dr. John Todd.

and Purchas, but hang it all you wont converse. Well then I will come back from reverie to earth and take to writing. Here I am in the good Bishops house; over an examination and waiting to go down to Nevis to take up, as Rector, the United Parishes of St George and St John. It seems very wonderful, very mysterious. . . . On Saturday the 25th in the Cathedral I was called to the holy order of Priest and now here I am flesh and blood set to do God's work. The time is short and there is a deal to do, but having stood so long in the Market Place idle and no man having hired me, now that I have found a Master let me go in too for the [illegible]. The Work is very severe and the area comparatively large and populous but still I can do a great deal. I intend to keep up my four services and those on Sunday on Wednesdays and Fridays; and I have just got our school going with 115 children. In St John's Parish, I have been bundling out a Three-decker and Kitchen Table, and have got in a neat Chancel, proper altar, Lectern Prayer desk and 10 new sittings round the Chancel. By degrees things will go well. I wish you would send me the address of the man who sent you the paper for the Church. I want to get as much as will do the Chancel Walls of both Churches. How I wish I was near you now. I dont despair. Some day when I have set the two old decayed parishes up and made the work easy, I will run back to the old place and end my days in the snow. . . . I am trying to get you a collection of ferns which I hope to find an opportunity of sending through Halifax. I have not looked at an object since I left Toronto, and I dare not even think for five Minutes of any work that is past. We wont talk about it. I long to hear from the Provost for he does give one such good advice and useful hints. . . . Now my reading for examinations is over I will have more leisure for writing and dear Osler shall have a scrawl. Tell Jim I will send him a letter about the Medical Books. Osler can help him select them. Love for all. Farewell old fellow. Yr affect

J. BOVELL.

One of the few of Osler's early letters which have come to light dates from this period. That there are not more of them is lamentable, in spite of his sharing the strong family characteristic of reticence regarding his personal doings. It makes clear that even in his youth words so ran from his pen that it was left for others to dot the i's and cross the t's for him:

To his sister Charlotte from W. O. Montreal, July 6th [1871].

My dear Chattie,—First and foremost you may mention casually that though I am 'too proud to beg too honest to steal' yet I shall be reduced to one or other remedy before long unless a check arrive

soon. Lazarus was nothing compared to what I have been for nearly three weeks. Drat the dimes. I wish we could get along without them. I got your letter to-day, after being five weeks from home & thought it time. Marian's baby was baptized on Tuesday afternoon & was honoured by me standing Godfather. I am so glad poor Frank has got home safe & sound, give him my love. Tell Molly to take her boy if he is a good one & not likely to take to drink & abuse her. If he does I will be down on him. Poor Hal! wonder he did not break his neck, he may yet. I am up to my eyes in work, but keep healthy & as we have had no very hot weather it has been quite endurable. Such a nice fellow is boarding here now called Henderson. I knew his Sisters when I was at Weston. He is a St Johnsite & a high 'un and good 'un too. There has been a jolly flare up at St Johns. Deacon Prime circulated two copies of an extreme sheet called the 'Rule of Life'. Mr Wood & Mr Norman were accused of it at the Synod & both declined to answer then but would answer their Bishop. Luckily they new nothing about it, but poor Prime has had his license taken away. On Sunday last Mr Wood preached a Sermon on it & acknowledged that though he could not hold it all himself he would not quarrel with any of his Parishioners if they did. He took exception principally to 'prayers for the dead'. It was a regular 'Confession of Faith' on his part & was splendidly given. I will send you a copy of the Rule &c. when I get some surplus cash, but *dont* you circulate it (on the Guv's account) as it is strong meat not fit for Protestant babes to chew. I am glad Dr Locke progresses, tell him my letter is coming & hint that his has most probably been detained at the Dundas P. Office. Ask him to hunt it up. How does your lad get along in England. Tell him not to forget to hunt me up when he is on his way back. 48 St Urbain St is my number yet. Our Dutch is progressing but not as rapidly as I would wish. I have so little time to spare for it. Forgive this scrawl, you dot the I's and cross the T's for me. Love to Mammy, aunt & all Yours

BENJ.

As will be seen, being hard up was no uncommon thing for one who habitually behaved with his own meagre resources as Bovell did with his patients' fees, which went out as fast as they came in. The 'Rule of Life', the 'extreme sheet' which raised such a rumpus at St. John's, must have been similar to some of the tracts often found in Rev. W. A. Johnson's possession, to the consternation of some of his parishioners, being strong meat, not fit for the orthodox like Canon Osler.

The summer of 1871 was spent largely in Montreal,

according to his own statement in one of his later lay sermons,¹ and it was at this time that he came into particularly filial relationship with Palmer Howard, whose library was put at his disposal. He was probably clerking in the General Hospital, and attending the post-mortem examinations there, and he confesses that 'much worried as to the future, partly about the final examination, partly as to what I should do afterwards, I picked up a volume of Carlyle . . .', and in it read the familiar sentence, 'Our main business is not to see what lies dimly at a distance but to do what lies clearly at hand'—the conscious starting-point of a habit that enabled him to utilize to the full the single talent with which he often said he had been entrusted. It was, in his estimation, one of the two trifling circumstances by which his life had been influenced, the first having been the paragraph in 'Father' Johnson's circular of announcement stating that boys would learn to sing and dance ('vocal and pedal accomplishments' for which he was never designed)—a paragraph which diverted him to Johnson's school in Weston. The other trifling circumstance was the line from Carlyle. Thirty years later in an impromptu talk² to the students of the Albany Medical College, he is reported to have said:

I started in life—I may as well own up and admit—with just an ordinary everyday stock of brains. In my schooldays I was much more bent upon mischief than upon books—I say it with regret now—but as soon as I got interested in medicine I had only a single idea and I do believe that if I have had any measure of success at all, it has been solely because of doing the day's work that was before me just as faithfully and honestly and energetically as was in my power.

How he found time to acquire his familiarity with general literature has always been a source of mystery to Osler's many friends. Probably it was at this early period that he began his life-long habit of a half-hour's reading in bed before putting out his light. Most medical students, alas, are too engrossed with their work for such literary pursuits, desirable though they may be. But he never ceased to

¹ 'A Way of Life.' An address to Yale students, 1913.

² Delivered Feb. 1, 1899. Cf. *The Albany Medical Annals*, June 1899, xx. 307-9.

encourage the habit, and the books he recommended¹ as a student's bedside library in all likelihood represent those with which he himself became acquainted in this way.

Until 1870 the McGill Medical School had been run on a proprietary basis, and the teaching was almost entirely in lecture form and given by general practitioners. The Chair of Materia Medica, for example, fully stuffed with time-honoured drugs, was occupied by William Wright, who incidentally had considerable repute as a surgeon, and subsequently became a preacher. Robert Craik held the Chair in Chemistry and later became the Dean of the Faculty. Lectures on the Institutes of Medicine, which comprised what is now recognized as physiology and pathology, were given by William Fraser, a graduate of Glasgow, though there was no semblance of a laboratory until Osler himself in 1875 succeeded to the chair. A bluff Englishman named William Scott was Professor of Anatomy, who rarely if ever was known to enter the dissecting-room, this disagreeable duty being left to his demonstrator; and the material is said to have been obtained from convenient cemeteries by the French students, who thereby paid their school fees. All this, which resembled the Edinburgh programme of an earlier day, was soon to be revolutionized by Francis J. Shepherd, one of Osler's contemporaries and intimates.² Indeed, as will be seen, there were a number of youngsters among the students of the day, who in the course of a few years were destined to take over and instil a modern spirit into the pre-clinical years of the old school. Of the clinical teachers whom Osler came under, there was Duncan MacCallum in midwifery, who leaned heavily, in his meticulous lectures, on the traditions of the Dublin Rotunda, but otherwise was chiefly occupied with a lucrative practice, so that the senior students were largely left to their own resources at the Lying-in Hospital. Another was George W. Campbell, Dean of the Faculty and Professor of Surgery, a vigorous and confident operator trained

¹ 'A Bedside Library for Medical Students.' Appended to 'Aequanimitas and Other Addresses.' 1904.

² Cf. Dr. Shepherd's privately printed 'Reminiscences of Student Days and Dissecting Room'. Montreal, 1919; written at Osler's solicitation.

in pre-antiseptic days, for Lister at this time was little more than a rumour in Canada, if even that, and the surgeon of the day operated in his ordinary clothes, collar, cuffs and all, the more particular ones, indeed, in a frock-coat. There was a short course, too, in medical jurisprudence, and the clinics at the old General Hospital were conducted by George E. Fenwick in surgery and J. Morley Drake in medicine. Fenwick was a bold operator of pre-Listerian type, his house surgeons at the time being George Ross and Thomas G. Roddick, of whom more will subsequently be heard; and Roddick a few years later brought back from Edinburgh the 'Lister ritual' which was to transform surgery. J. Morley Drake soon succeeded Professor Fraser in the so-called Institutes of Medicine, though he gave up the post two years later when it became filled by a new type chosen from the younger generation.

But the member of this faculty to whom Osler was chiefly indebted was R. Palmer Howard—a courtly gentleman, scholarly, industrious, stimulating as a teacher; and though the students of the day felt that he was devoid of humour, he nevertheless was popular with them, and even at this time was one of the chief figures in the school of which in 1882 he became Dean. Like his colleagues he, too, was a general practitioner of surgery as well as physic, but where he perhaps differed chiefly from them was through his interest in morbid anatomy, an interest with which he succeeded in inoculating some of his pupils. In a later address Osler gave this picture of him:

In my early days I came under the influence of an ideal student-teacher, the late Palmer Howard of Montreal. If you ask what manner of man he was, read Matthew Arnold's noble tribute to his father in his well-known poem, 'Rugby Chapel'. When young, Dr. Howard had chosen a path—'path to a clear-purposed goal'—and he pursued it with unswerving devotion. With him the study and the teaching of medicine were an absorbing passion, the ardour of which neither the incessant and ever-increasing demands upon his time nor the growing years could quench. When I first, as a senior student, came into intimate contact with him in the summer of 1871, the problem of tuberculosis was under discussion, stirred up by the epoch-making work of Villemin and the radical views of Niemeyer. Every lung lesion at the Montreal General Hospital had

to be shown to him, and I got my first-hand introduction to Laennec, to Graves, and to Stokes, and became familiar with their works. No matter what the hour, and it usually was after 10 p.m., I was welcome with my bag, and if Wilks and Moxon, Virchow or Rokitanski gave us no help, there were the Transactions of the Pathological Society and the big *Dictionnaire* of Dechambre. An ideal teacher because a student, ever alert to the new problems, an indomitable energy enabled him in the midst of an exacting practice to maintain an ardent enthusiasm, still to keep bright the fires which he had lighted in his youth. Since those days I have seen many teachers, and have had many colleagues, but I have never known one in whom was more happily combined a stern sense of duty with the mental freshness of youth.¹

It has been said that the school borrowed its traditions largely from Edinburgh. These were a mixture of work and hilarity, and though there were no rival political parties such as Edinburgh sees engaged in active warfare in connexion with its rectoral elections, there was gaiety enough, and what were in the day called 'footing sprees' were bibulous affairs, for the expense of which the seniors were privileged to tax the freshmen. The annual 'Founders' Festival' was another occasion in which the students took untold liberties with their seniors and played practical jokes of a kind it has long been the tradition of unbridled students the world over to play. Though at the time he was a 'teetotaller', Osler doubtless entered into all these pranks with as much spirit as any, for there are certain dispositions which do not require any adventitious stimulus to enliven them. But though among the gayest when occasion offered, better than most young men he had learned to conserve his time, and though not a gold-medallist of his class he received at the end of the term an honourable mention of unusual sort. The prizes announced at the annual convocation of 1872 were as follows:

(1) The Holmes Gold Medal awarded to the graduate receiving the highest aggregate number of marks for all examinations, including primary, final and thesis. [Awarded to Hamilton Allen.]

(2) A prize in Books, for the best examination—written and oral, in the Final branches. The Gold Medallist is not permitted to compete for this prize. [Awarded to George A. Stark.]

¹ 'The Student Life.' 1905. Cf. 'Aequanimitas and Other Addresses.'

(3) A prize in Books, for the best examination written and oral, in the Primary branches. [Awarded to Francis J. Shepherd.]

(4) The Faculty has in addition this session awarded a special prize to the Thesis of William Osler, Dundas, O., which was greatly distinguished for originality and research, and was accompanied by 33 microscopic and other preparations of morbid structure, kindly presented by the author to the museum of the Faculty.

The gentlemen in order of merit who deserve mention :—In the Final examination, Messrs. Osler, Browne, Waugh, Marceau, Hebert, Pegg, St. John, and Morrison. In the Primary examination, Messrs. Alguire, Hill, Carmichael, McConnel, Ward, Kitson and Osler.

Osler's thesis was never published, and only a fragment of it remains—the introduction, couched in rather flowery and figurative language. It being one of his youthful productions, and his first essay in studies from the pathological laboratory where he was to spend so many years, a paragraph or two may be quoted, misspelling and all :

In that Trinity of being—of body mind and soul—which so marvellously make up the Man, each one has its own special ills and diseases. With the first of these—the body—have we here anything to do, leaving the second to be attended to by that class of men whose duty it is, 'to minister to minds diseased', i. e. the Psychologists, while those of the third class beyond a Physician's skill seek aid elsewhere. Few indeed are permitted to end their days in a natural manner, by a gradual decline of the vital powers, till that point reached, where nutrition failing to supply the fuel, necessary to keep the lamp of life alight, leaves decay to drag back the fabric to the dust. . . . The number of avenues through which death may reach us, the natural frailty of our bodies the delicate and intricate machinery which maintains us in a condition of health may well make us exclaim with the Poet

Strange that a harp of thousand strings
Should keep in tune so long.

To investigate the causes of death, to examine carefully the condition of organs, after such changes have gone on in them as to render existence impossible and to apply such Knowledge to the prevention and treatment of disease, is one of the highest objects of the Physician. . . .

CHAPTER V

STUDENT DAYS ABROAD, 1872-1874

A VOLUMINOUS letter from 'Father' Johnson addressed to Osler in Dundas after his graduation, indicates that his departure for a period of study abroad—the natural goal of every newly-fledged Canadian M.D.—was impending. Johnson lamented that he was tied down and would be unable to meet him in Toronto to see about Bovell's microscope,¹ and enclosed 'a copy of Devout Life for your dear Sister God bless and protect her'. Canon Osler could scarcely have afforded to send a son to Europe for the proposed two years' absence, even though the elder children were by this time married and living away from home. But one of his sons came to the rescue, for Edmund, who was engaged to a Scotch lady, a Miss Cochran of Balfour, was on the point of paying a timely visit to his future relations and was glad to have the lively companionship of his younger brother—indeed furnished the \$1,000 necessary to see him through his prolonged stay.

They sailed on one of the Allan Line steamers, on July 3rd, and landing in the north of Ireland visited the Giants' Causeway and the Lakes of Killarney. From there W. O. must have gone on to London, for in a pocket note-book of the period is written: '*William Osler, M.D. London July 1872. Cash Account. Be frugal: pay as you go.*' It seems to have been one of the few periods of his life in which he kept an account of his expenditures, and cab fares and tips and tea are all duly recorded. In later years after beginning his consulting practice he methodically entered all items of his professional income in a small account-book for physicians such as are put out

¹ The Rev. James Bovell Johnson writes that 'when Bovell's personal belongings were sold in Toronto I can remember being with Osler at the sale, and Osler then bought-in certain family treasures for Mrs. Barwick, Bovell's daughter, then living in Toronto'.

each year by some of the various medical publishers.¹ The items, to be sure, for many years were few and far between, but after this first sojourn abroad he apparently kept no record of his outgoings, and was in consequence continually hard up. Like Bovell he responded to every appeal, indeed often before the appeal was made, with a generosity which was apt to be beyond his means. It was not until August that he rejoined his brother in the Highlands, as told in the following letter—one of the few home letters which escaped a subsequent conflagration :

From W. O. to his mother.

Balfour, Aug 14th [1872].

My dear Mother,—Up here in this far north region, I had forgotten the distance from Liverpool and so let Canadian mail day pass, this however will reach you via New York. Since I last wrote, I have visited many new places & met many new people. I left London on Thursday evening for Edinboro' by the London & North Western via Carlisle. I was fortunate in having a nice travelling companion and one who knew something of old friends; it was a gentleman from the West Indies who knew Dr. Bovell intimately & had seen him within the last few months. He gave a very nice account of him and his doings which naturally interested me very much. I managed to sleep pretty fairly, though not as I would have in a Pullman. We arrived in Edinboro at 9.30 a.m. on Friday morning, too late to take the through train to Aberdeen so that left me four hours to examine the city. I was much struck with its beauty; it exceeds anything in cities I have yet seen. I found out young Grasett (of Toronto) who is studying medicine at the University, and under his guidance *did* the wards of the Royal Infirmary (the chief hospital of the city) a queer rambling old place, as you may imagine as it was built in the beginning of last century. . . . At Aberdeen I was met by Mr. Alex. Cochran who took me to his house, where I slept that night. In the morning I had a few hours to spy out the 'Granite City'. It is very regularly built, somewhat too uniform but has a delightful cleanliness about it which to a Londoner like myself was very refreshing. I left at noon for Glenninan, Mr. D. R. Smith's place, where Edmund was staying; it is a nice spot & he has recently rebuilt his house, in grand style. Both he and his wife seem very delicate, but probably his trip to Canada with Edmund will do him good. In the evening we went on to Balfour,

¹ These account-books from 1872 to 1919 have all been carefully preserved and Osler had them rebound. He evidently felt that the professional income of a consultant in his position and of his day might some time be a matter of historical interest.

the Cochrans' place, and there received a hearty welcome. The trip up the Deeside as far as Aboyne is very lovely, but up towards Balmoral it is still more so. I will have to postpone the account of my journey to the Aberdeen Highlands as I wish this to catch the Friday mail via New York. We go down to Edinboro again and from thence to Glasgow and the Western Highlands, but more of all this by the Cunard. I hope all are well. Much love. Yours in haste,

WILLIE.

One incident of the hearty Scotch welcome has been gathered from other sources, indicative of his teetotalism as a young man: for Mrs. Cochran is said to have remarked to her prospective son-in-law that it was sad one so young as his brother should have to refrain. Otherwise there is scant record of this sojourn in the Highlands, which in after years he came to know so well, though in one of his later addresses¹ he refers to the visit in Glasgow where he first met Joseph Coats the pathologist and Sir William Macewen. In another place also,² he gave a brief summary of the professional occurrences of the next year or more:

In the summer of 1872 after a short *Rundreise*, Dublin, Glasgow and Edinburgh, I settled at the Physiology Laboratory, University College, with Professor Burdon Sanderson, where I spent about fifteen months working at histology and physiology. At the hospital across the way I saw in full swing the admirable English system, with the ward work done by the student himself the essential feature. I was not a regular student of the hospital, but through the kind introduction of Dr. Burdon Sanderson and of Dr. Charlton Bastian, an old family friend, I had many opportunities of seeing Jenner and Wilson Fox, and my note-books contain many precepts of these model clinicians. From Ringer, Bastian and Tilbury Fox, I learned too, how attractive out-patient teaching could be made. Ringer I always felt missed his generation, and suffered from living in advance of it.

From W. O. to his sister Charlotte (now Mrs. Gwyn). Sept. 24th

My dear Elizabeth,—I dated this letter last night, and had I gone on with it would have given you all a good wiggling, most unjustly, for I thought the Canadian mail had been delivered & there were no letters. However, in the morning on going to the Hospital

¹ 'The Pathological Institute of a General Hospital.' *Glasgow Medical Journal*, Nov. 1911, lxxvi. 321.

² At St. Bartholomew's Hospital, Dec. 1913: cf. 'The Medical Clinic: a Retrospect and a Forecast.' *British Medical Journal*, Jan. 3, 1914.

I received yours of the —I don't know. Why can't you date your letters?—and Jennette's of the 8th Sept. which amply made up for the brevity of yours. The man at the letter box always has such a knowing smirk on his face when he hands me my letters on a Wednesday morning, the looney must think they come from my girl, whoever she may be. I am sure that any one reading yours & Jennette's letters of this morning might suppose that they came from Utah and I was a young Mormon in embryo, so feelingly do each of you allude to two separate girls as *mine*. . . . We have had it wretchedly cold for the last week and several typical London days have been interspersed. I went to the Harrisons' one day last week and after dinner accompanied them to Mr. West's church which is rapidly being repaired after the fire. On Sunday I took a trip out to Putney to dine at Atwell Francis's. I got there early and went to St. John's Church, moderately high and very well filled. The Francises do not trouble Church much, I do not think it runs in the family. Mrs. Francis is very pleasant and they have a brace of fine boys. I went with Atwell in the afternoon to Kew and pulled down the river in the evening over the course of the International boat-race. Next Sunday I shall probably go to the Boyds' [family friends in England who used to send missionary boxes to Bond Head, and one of whom he was subsequently to meet in Oxford days] and take with me your wedding cake as an introduction to the sisters. . . . They had a grand commemoration service at All Saints Lambeth on the Anniversary of the S.P.U.C. (I am afraid those initials are incorrect, it is the Christian Unity Society). I did not go, but regretted it after reading the description. The Williamsons I suppose are just now in the agony of moving as I saw in the Banner that the sale was to take place on the 20th. Edmund by this time has been with you or ought to have been. Love to Mother & all the Rectory folk. Yours affectionately,

WILLIE.

As is characteristic, he says very little about his own plans for the future, though others are concerned about them as this letter from the West Indies indicates :

From James Bovell to W. O. The Farm, St. John's, Nevis,
Sept. 27th, 1872.

My dear Boy,—I have no one whom I love better than yourself, and altho' I have been careless in writing it has been caused by my hard work and ever increasing trouble. However I need not burden you with my griefs, which my sisters will tell you of when you call on them. Find them at 193 Hampstead Road, Regents Park, N.W., tell them I asked you to call to introduce you to Stuart. I more than rejoice at your success and if you will only go on as you have been doing the end is clear. I am at a loss what to say about your

settlement. I still cling to the notion of India as I know that no such field for fortune and fame is open to man elsewhere. Canada for some time to come must be limited in resources sufficiently remunerative, whereas India with its teeming population and immense wealth in Native Princes and Merchants affords all a professional man can desire. The Church here is in an awful state, it is being disestablished and disendowed and the negroïd life is a very sorry one to work upon. Methodism has eaten Christianity out of them and in place of it they have an emotional system which employs the phrases and language of Christians which is entirely void of life or principle.

I would give anything if Johnson could be induced to come here, there is a vacant Parish, £130 sure for a time and £130 more, easily made up. Of course with a good but *low*-church Bishop we can't have Vestments but I take care to have all I can in order. I have just finished a reredos the centre panel of which has a Cross 18 inches high. The new altar is quite correct and altho' I am not permitted to stand in the middle front, I do for primary consecration stand at the North W. corner, but kneel in front at receiving, and saying the service. I have sent home to my sister a Manuscript of all Hooker has said on the Eucharist. It is now lawful so I think if it was published separately it would do good. He is plain. . . . I will write next Mail,—Post time up. Yrs. ever

J. BOVELL.

The project of taking up his work in India, where in Bovell's estimation was offered the greatest 'field for fortune and fame', was evidently very seriously considered at this time, and apparently roused some consternation among his relatives and friends at home, for it was not until early in the following year that he wrote to his cousin Jennette to quiet her soul about his India schemes. Whether there was any influence other than the advice of Bovell is not apparent, but the India Medical Service had always attracted a goodly number of the very best of the British medical students, and it was well known that it was a corps with the highest *esprit*, and that the opportunities for work as well as for 'fortune and fame' were great. Many years later in an address before the members of the first graduating class of the newly established Army Medical School in Washington,¹ he said: 'As I write, an inspiration of the past occurs, bringing me, it seems, closer to you than any of the points just mentioned, a recollection of the days

¹ 'The Army Surgeon.' Feb. 28, 1894.

when the desire of my life was to enter the India Medical Service, a dream of youth, dim now and almost forgotten—a dream of “Vishnu land, what Avatar!” But this was a short-lived aspiration, for he appears to have set his heart on a career in ophthalmology. Various reasons must have led him to this decision, and it was undoubtedly a bitter disappointment when the project was finally relinquished. Specialization in medicine was just coming to the fore, and in Montreal as yet there was no one who limited his work to the diseases of the eye. Realizing that in the absence of financial backing, and with existing conditions of medicine in Canada, he would have to enter practice for a living, he decided upon a speciality which would permit him in his spare hours to pursue science rather than to have practice pursue him, as would be the case were he to succeed as a general practitioner. Moreover, he was evidently influenced by the career of the most eminent eye-specialist of the day, who though chiefly identified with the Royal Ophthalmic Hospital at Moorfields, had formerly been Professor of Ophthalmology at King’s College. His deep admiration for Bowman as the type of man who, because of a thorough grounding in science, could subsequently rise high in a speciality, was expressed years later in an address to a body of specialists in another field.¹ But Bowman still retained his enthusiasm for physiology, and he advised the young man, whatever he was to do in the future, to begin by a period of work at University College Hospital² with John Burdon Sanderson. The advice was taken, and a profitable and happy seventeen months was passed in Sanderson’s laboratory. It was a curious trick of fortune that he should have come to work under the man whom thirty-four years later he was destined to succeed as Regius Professor of Medicine at Oxford.

¹ ‘Remarks on Specialism.’ *Archives of Paediatrics*, Phila., 1892, ix. 481.

² University College was born in 1828 of an effort to establish what was to be a non-sectarian University in London, a project which was thwarted by the establishment of a rival institution, King’s College, backed by the Anglican Church which was jealous of any loss of its hold on national education. In consequence of this split the University of London long remained a name only, and functioned chiefly as an examining board.

Osler's laboratory note-book of the time is preserved,¹ showing that the course began October 7th with the examination of the inflamed anterior chamber of the eye of a frog and of an inflamed lymph sac experimentally produced, with subsequent microscopical study of the tissues. It was actually a course in what to-day we would call experimental pathology, for physiology and pathology were not divorced as they have since become, to the harm of each and to the considerable neglect of their offspring histology, which concerns the microscopical examination of the tissues in health and disease. The '70's, as may be recalled, saw the dawn of a most important period for medicine, which had awakened with the new learning relating to the microscopical sources of disease following upon the cellular doctrine of Virchow, and leading up to the bacteriological discoveries of Pasteur and Koch, and the adaptation of them by Lister to surgery.

Interesting as it might be, this is no place to do more than hint at the story of the gradual separation of structure and function. Earlier anatomists like the Hunters and their associates of the Windmill School were as much concerned with the one as the other. But in a progressive school like that at University College a curious situation arose, there being one Professor of Anatomy and another Professor of Anatomy and Physiology. The subject of anatomy had become little more than a weary descriptive science, and remained so until it was revived in course of time by Professor His and his pupils. Meanwhile its one-time handmaiden physiology was pressing for a separation, and when this was accomplished the clever child took with her the microscope and the finer study of structure, leaving nothing but the cadaver for anatomy. Thus it came about that histology, in which lay the chief promise of future reward from research, has to this day in English schools been part and parcel of physiology rather than of anatomy.² It was

¹ 'Short Notes on a Course of Practical Physiology by Burdon Sanderson at University College. London, 1872-3.'

² The *Chair in Anatomy* at University College has been held successively by J. R. Bennett, Richard Quain, G. V. Ellis, and G. D. Thane. The *Chair of Anatomy and Physiology* was held first by Jones Quain, then by the famous

into the situation, with its spirit of revival of physiological investigation for which Burdon Sanderson, Michael Foster, Lauder Brunton and E. Klein were chiefly responsible, that Osler was introduced, and it was one of which his early familiarity with the microscope and his growing taste for experimental pathology particularly qualified him to take advantage. The situation, too, explains in a measure his peculiar fitness, despite his youth, for the position offered him two years later at McGill as Professor of the Institutes of Medicine, then comprising physiology, histology, and pathology. Unless perhaps with Cohnheim in Germany, no more stimulating group could possibly have been found than those who were at work in the '70's in Burdon Sanderson's laboratory. Sanderson's great desire was to make experimental physiology pre-eminent in the teaching, and this part of the work he reserved for himself, while to Edward Schäfer, a young man of Osler's age, was delegated the practical histology, to T. J. M. Page the teaching of physiological chemistry, and to Klein, who had come over from Vienna, was given the histological pathology.

To W. O. from R. Palmer Howard.

Montreal, 25 Oct. 72.

My dear Osler,— . . . You have by this time well settled down to yr work in the Metropolis, I doubt not, and are picking up much that will be useful to you hereafter. Touching your prospects as

William Sharpey whose pupil and successor was Burdon Sanderson. With this chair there was established a separate *Lectureship of Practical Physiology* which was held in turn by Sharpey's two most distinguished pupils. The first of them, Michael Foster, was captured in 1870 for Trinity College, Cambridge, where he started the modern science movement, Burdon Sanderson having been appointed to succeed him at University College. This lectureship was finally changed into a separate *Chair of Practical Physiology and Histology*, and Sanderson who had been appointed to succeed Foster occupied it until Sharpey's retirement from the Chair of Anatomy and Physiology, at which time the *Jodrell Chair of Physiology* was established to include physiology and histology. The Jodrell Chair has been occupied in succession by Burdon Sanderson, by Edward A. Schäfer, and by E. H. Starling. Burdon Sanderson's withdrawal was in 1882 when he accepted the Waynflete Professorship of Physiology at Oxford. This appointment was the first movement towards the revival of what had been termed 'the lost School of Medicine of Oxford', and it is noteworthy that the proposed grant of £10,000 to build Sanderson a laboratory met with organized opposition on the part of the antivivisection societies—an opposition which was overcome at Convocation by the small margin of 188 to 149 votes.

Oculist, you will have much more to contend with than we ever thought of when we spoke together on the subject. In July or August last Mr. Morgan, resident Surgeon at Moorfields, and formerly in charge of the eye-wards at Netley, wrote to me informing me that he purposed coming to Montreal as an Oculist. We had known each other six years before at Moorfields during a short visit I made at that time. . . . Of course were he to come, it would seriously affect your hopes as to making eye dis. a speciality. As between you and Dr. Buller I may safely say, you would have the countenance and support of your old teachers. But here the plot thickens. . . .

And Howard went on at length to say that there were indeed three candidates in the Montreal field with better chances than Osler, so that his advice would be to abandon ophthalmology and 'to cultivate the whole field of Med. and Surg. paying especial attention to practical physiology', which in his opinion was destined to become one of the most popular departments of medical teaching. He closed by announcing that Dean Campbell had requested him 'to present an order from Dr. Wright upon Noëk, the medical bookseller for your books—which you will select yourself and have printed upon them: "Graduation Prize Awarded to William Osler, etc."'. With Howard's letter the rough draft of Osler's reply has been preserved. It says:

. . . As you may imagine I was not a little disappointed at the blighting of my prospects as an ophthalmic surgeon, but I accept the inevitable with a good grace. I spoke to Morgan yesterday and he tells me as follows: that he purposes going out early in the spring stopping until August, when he has to return on business, and then going back if the place suits him. He is a very practical man and one of great experience, so much so that there is no surgeon connected with Moorfields who does not listen with deference to his opinion. He might be younger and in better health, but it is difficult to procure an article absolutely perfect. I now have to look forward to a general practice and I confess to you it is not with the greatest amount of pleasure. I had hoped in an ophthalmic practice to have a considerable amount of time at my disposal, and a fair return in a shorter time, but in a general practice which will be much slower to obtain (if it becomes of any size) what ever time you may have is always liable to be broken in upon. Now Practical Physiology—setting aside anything like original work—and considering merely the teaching, requires much time and will need, to be done properly, some outlay on the part of the College or myself. The upshot of all this is, that I want something definite stated as

regards my future connection with McGill College and I have written the Dean to that effect. It simply will not pay me to go on here spending quite half my time working at a subject [physiology] which may eventually become popular with the students, but the fees from which in Canada will never alone repay either the outlay required to qualify myself or the time spent over it. I am sorry to have to appear so mercenary, but the recollection of my old friend Dr. Bovell, who tried to work at Physiology and Practice both and failed in both, is too green in my memory to allow me to take any other course. My ambition is in time to work up a good Laboratory in connection with the College, and if I get a favourable answer from Dr. Campbell, with that object in view I will continue my Physiological studies after this winter, but if not, I must turn my attention more fully to those branches which will enable me to engage in a general practice most successfully. . . . I am very busy at present in the Laboratory, spending four or five hours in it every day. I commenced as a green hand *ab initio*, in order that I might miss no little details. I have a little private work going on under Dr. Sanderson's superintendence connected with the antagonistic action of Atropin and Physostigmin on the white corpuscles, but whether it will come to anything or not remains to be seen, however in any case the practice is helpful. I purpose after Xmas taking a thorough course in Practical Chemistry on your advice, for of course that is the basis of many Physiological investigations. I get some good P.M.'s at Univ. Coll. and the remarks made by some of the men especially Drs. James Barlow and Ringer are very valuable. I have made a good many useful friends at Moorfields among the Surgeons and as they are nearly all connected with General Hospitals one can go about with less restraint always feeling sure of a personal welcome. Browne and I are together which makes it very pleasant. . . .

He and Arthur Browne shared a room somewhere in Gower Street, and there were a number of other young Canadian students of their acquaintance in London. Zimmerman, who had entered the Toronto school with him, was at St. Thomas's, and Buller, who ere long returned to Montreal where he took up the practice of ophthalmology and rented an upstairs room to Osler, was now house surgeon at Moorfields. However great may have been Osler's disappointment in regard to his pet project, it was borne in a cheerful spirit, and the preceding exchange of letters indicates that before he left Montreal there must have been some movement on foot to create a position for him in the school. His reply to Palmer Howard evidently was transmitted to Principal Dawson, who shortly after made a new proposal: in effect,

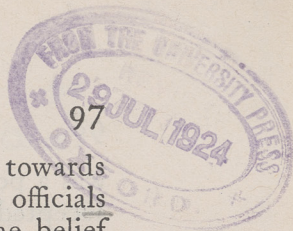
that he was shortly to retire from the Chair of Botany ; that a new lectureship was to be created to embrace the faculties both of Medicine and the Arts ; that the incumbent should be proficient in structural and economic botany, including the use of the microscope ; that botanical science held out a good chance for scientific reputation, though from a pecuniary point of view—well, the fees from the medical classes alone amounted to \$200 and might increase. With Principal Dawson's letter was enclosed one from Dean Campbell, which enlarged on the subject as follows :

The enclosed note from Principal Dawson anticipates much of what I have to state upon the subject. A three months' course of Pathology with the use of the Microscope might be added to the Botany course. It is not compulsory with us, but it is among the requirements of the Medical Council of Ontario, and I have no doubt would be well attended. We have the advantage of now being able to offer you first rate accommodation, probably as good as any in America, but our chairs are not endowed, and the Professor depends upon his class fees for the remuneration, so that you must take your chance as all of us have done, and look chiefly to private practice for a *living*.

We all as a Faculty will be most happy to have you associated with us, and the fact that we entertain such a high opinion of your acquirements and character, as to offer you the Chair of Botany, will give you, a comparative stranger in Montreal, a Great Advantage in commencing practice. I was most thankful in my early career here, to obtain such a connection, with precious little in the way of emolument.

I am not authorized to make any definite offer of a separate Chair of Pathology, at present that branch is included in the Institutes course, and taught by Dr. Drake, who might or might not be willing to confine his instructions exclusively to Physiology, I merely speak of the possibility of such a decision being at some future period considered advisable. You should certainly devote the chief share of your attention to Medicine and Surgery. A young married couple might as reasonably expect to live upon love as a medical man to live upon pure science in this most practical country. Let me know when you have Maturely considered the subject, whether you will accept Principal Dawson's proposal, and qualify yourself to teach Botany in the way in which he points out, or whether we are to look elsewhere for some one to relieve him from that portion of his labours. . . .

This proposal was followed in the next mail by a long and friendly letter from Palmer Howard, who hopes that



he 'will feel the College is doing what it can towards advancing your interests and securing for you some official connexion with the University', and expresses the belief that Principal Dawson might in time turn over to him not only the medical but the arts course in Botany as well, and some day might also entrust him with Zoology. However, the university being poor and needy and in no position to establish lectures in practical physiology at present, he advises his young friend to qualify himself for general practice, and if he would 'spare the time and money to run up to Edinbro. for the F.R.C.S.—which will cost only £5, and coming back here it will do you no harm to have a diploma from the "Old Country" although not intrinsically worth more than if fairly obtained here.'

Osler's replies were frank and straightforward refusals of the offer, on the grounds of his absolute unfitness for the position. The rough drafts of his answers to all three of these letters have been preserved; it may suffice to quote one of them:

My dear Dr. Howard,—I have written to Dr. Dawson refusing the kind offer made me of the lectureship in Botany. I am afraid you will not be pleased at it, but I really can not do otherwise. If I knew anything of Botany at present; if I had nothing else left to do for two or three years it might be thought of; but as matters stand now I would only make a fool of myself in accepting such a position. I would feel far too keenly the anomalous situation of holding a chair in Botany & knowing absolutely nothing of the Flora of my native land. I am afraid the offer was made more from personal feelings than any fitness for the Post. I can assure you I appreciate highly the compliment paid me & consider that McGill has more than fulfilled any obligation she may have considered herself under. I hope nothing was said about it for I should not like it to come to the ears of my people, they would be vexed at me, not knowing the ins & outs of the case. I continue my work at U. C. Laboratory & am satisfied so far with my progress....

It was unquestionably the right decision, though the offer was one that might easily have tempted a young man of twenty-three who knew his mind less well. This exchange of letters has been a chance finding: Osler himself, so far as is known, never referred to the matter again. It is a somewhat curious coincidence that this, his first offer,

was a post in Botany, and that almost the last position he accepted, though an honorary one, was as President of the Botanical Society of the British Isles.

To his sister Mrs. Gwyn from W. O.

December [1872].

My dear Chattie,—Though I wrote you last week I cannot help writing again and wishing you—though late—‘Many happy returns of the day’. Also it will be Christmas time when you get this; and it is but brotherly to write and wish you at this the first Christmas of your married life, both a happy one and a merry New Year. There goes. I have reversed matters but you must overlook all mistakes as I have a host of letters this week, one of which already written, you will blow me up for. The Canadian mail is very late this week, but we must expect that as the winter comes on. Nothing much has been going on. I am very busy but shall slacken a little at Christmas.

Wednesday. I had intended on Sunday to go up and see the Pellatts, but Canon Liddon was preaching at St. Pauls and I could not resist the temptation of hearing him again. He is very long (i. e. his sermons), nearly an hour; we did not get out till after five o'clock. I went to All Saints both morning and evening. As I came up from church in the morning I went into a very dour looking edifice about five minutes walk from our lodgings and to my surprise I found it another High Church. I could not see any name to it, but I will find out and go there occasionally. Christ Church, Albany Street which is almost within a stones throw, is not nearly so high, no vestments, incense or the like, but I do not want to become enamoured of those as I will not get them in Montreal nor can I quite forego the notion that they are not at all orthodox. [Johnson and Bovell to the contrary.] To-day has been glorious, blue sky and no rain. Canadian steamer is telegraphed so that letters will be at the Hospital in the morning after reading which I may add a postscript. Much love. Got your letter this morning. Yours,

WILLIE.

Meanwhile very little is said of the work which has been going on since October 7th over the microscope in Burdon Sanderson's laboratory, or who were his fellow-workers, though for a time Francis Darwin had a table near by, and several times spoke of taking him for a week-end at ‘Down’, but did not do so as his father was not well. A letter from ‘Down’ to W. A. Johnson, telling him of such a meeting in the old home of the Johnsons would have been interesting, to say the least. Sanderson's course ended January 24th

with an exercise on the physiology of secretion, and Osler's last note reads:-

On the propriety of using the lower animals for the purpose of experimentation Dr. Sanderson said 1st, we are at liberty to use them on the same ground as we do for food: 2nd for scientific investigation are justified in giving pain: 3rd for mere demonstration we are not justified in giving pain. Hence all experiments are omitted which cannot be performed on anaesthetized animals.¹

To W. O. from W. A. Johnson.

The Parsonage, Weston,
Jany 9th 1873.

My dear Osler,—Yours of the 8th Ult^o is at hand, & it is the third you have very kindly and thoughtfully written without an answer from me. . . . Reasoning on general principles, no doubt your friend Dr Howard's advice to devote yourself to general medicine is good. I can not be expected to even offer an opinion on a thing I know nothing of. . . . I think I was turned from Botany as a specialty early in life, by some old medical man who lived near those steps w^h go down from Oxford Street by his saying, 'don't you think of a specialty until you are forty', or some such words. I really must not write so much on a thing I know nothing about. Is it likely that the faculty of McGill College can afford to answer you distinctly in writing, concerning your future position with them? I do not see how they can, because you would have a claim upon them. Perhaps they will; but if they do, they surely rate you very high. It is quite likely they will extend the offer, but not definitely, & it will be for you to consider what it may lead to eventually; provided there is a reasonable remuneration for the present. If you are obtaining a present remuneration (i. e.) if you are in a position where you are regularly paid, though it be only a small amount, look well before you leave it for future increased salary, or something indefinite; for one bird in the hand is better than two in the bush. I am very glad you got comfortably settled in London. I envy you your Church privileges. Do not be afraid to use them freely & lovingly. Many Churches in London, from what I hear & read must be doing a good work. I suppose many of them freely & openly admit every sensible usage of the Roman Churches without any reference to papal authority, or to the errors w^h have grown up from it. It is just what I could enjoy, &

¹ In the early '70's, as may be recalled, the antivivisection controversy in which Huxley was so actively engaged as protagonist for the scientists, was the subject of much discussion. It, however, was not until 1876 that in spite of the protests by Huxley, Darwin, Burdon Sanderson and others, the drastic act was passed which has so hampered medical research in the British Isles.

seems to me right. A return to the old paths. Tell me all you can about these matters when you write, but remember dear fellow I do not expect a letter. . . .

This very long letter contained a deal of excellent advice, which need not be quoted save for one question Johnson asked: 'May you not lessen your usefulness and knowledge in passing by general information to pursue a specialty?' This, too, had been Howard's suggestion, and accordingly the next ten months were given over very largely to 'walking the hospitals' in the old signification of the term; and in doing so he was particularly impressed by Murchison at St. Thomas's, and by the clinics given by Sir William Jenner and Wilson Fox¹ at University College. There he also followed Ringer, as well as H. C. Bastian who lectured on nervous diseases though he was chiefly engrossed at the time by his theories regarding spontaneous generation. Early in the year he took a course of lectures on embryology given by E. Klein at the Brown Institution, and must have been interested for '*James Bovell, M.D., M.R.C.P.*' appears only once on the pages of a full note-book; and at this time he evidently started some experiments on the blood of guinea-pigs, which, however, do not seem to have come to much. He even attended surgical operations, for Browne, his room-mate, who regularly sent medical letters home for publication in the journals, acknowledges his indebtedness to Dr. Osler for notes of surgical cases at the University Hospital, where Mr. Erichson was then in attendance. The two friends during this time had been making a desperate struggle to master German, but one of them at least had little gift for speech in foreign tongues, possibly

¹ Wilson Fox was not well at the time, and when he died some years later Osler wrote: 'When I look back, through the mist, to 1872-3 and try to recall specific days and hours, there are few which will return with greater distinctness than those in which I see Wilson Fox standing at the head of a bed at University College Hospital, unravelling for the class the complicated symptoms of some chest case. He had a refinement and charm of manner particularly attractive. Something of the gentle spirit of the great Friend, whose name he bore, and into whose Society he was born, pervaded his nature, and there was a kindliness in his manner which won the hearts alike of student and of patient.' [In '*Notes and Comments*', *Canada Medical and Surgical Journal*, June 1887, xv. 702-3.]

owing to his unmusical ear. They evidently got greater satisfaction out of their general reading, and to his 'much-loved Arthur Browne', himself devoted to English literature, Osler ascribes his introduction to Lamb and Coleridge. Together they must have begun to frequent the antiquarian book-stands; and as Osler had the prize money for his treatise, in the shape of an order for books on S. & J. Nock of Hart Street, Bloomsbury, he proceeded there, and in after years recalled the place as 'an indescribable clutter of books, whereas the brothers Nock, far advanced in years, were weird and desiccated specimens of humanity'.

To Miss Jennette Osler from W. O.

January 16th 1873.

. . . I hope they have sent down my last two or three letters as they tell of my Xmas visit in Norfolk.¹ I spent a very happy ten days in spite of a rather severe cold which kept me in doors for nearly a week. I did not get to church on Xmas day even; I was going to say for the first time in my life, but probably my first two Xmas days were spent in a very similar manner, eating & sleeping forming the chief part. Books, Music and cats are the chief features in Witton vicarage. The former I read, the second I listened to, & tried to understand, while the third I teased unmercifully. The girls are accomplished, good musicians, &c., but are lacking in looks which in spite of all else are very requisite. At Norwich I visited the Cathedral & saw what I could of the relics of my favourite Sir T. Browne. His skull & a good painting were in the Infirmary; his tomb in the church of St. Peter Mancroft. I could not resist the temptation of seeing Ely and so stopped there on my way up. It is a wonderful building, the restoration making it look almost perfect. I was there for the morning service, forming in fact with a couple of kids, the congregation. I am very sure that after a months residence in this moist Isle you would pine for the land of your adoption. It only needs the 'fountains of the great deep' to break up and then in many parts the deluge would be complete. For a few days the rain has ceased, but the clouds only permit an occasional gleam of sunlight. . . . I went to Drury Lane the other evening & saw the Xmas Pantomime. It was very grand & nice but oh! so long. I left long before it was over. Napoleon's death has caused such a sensation; he was buried yesterday. I will try & get a paper with full particulars in it though of course the news will be stale enough by the time you get this letter. You may quiet your soul about my India schemes. I shall *not* go there. Canada's my destination. . . . Kisses to all the kids. Yours

WILLIE.

¹ To visit relatives of his new brother-in-law, Colonel Gwyn.

This sojourn on the East Coast gave him his first opportunity to visit Norwich, and while there he was much moved by the sight of Sir Thomas Browne's skull, which many years afterwards he was instrumental in having placed in a proper receptacle. In a later address he thus refers to this visit :

The tender sympathy with the poor relics of humanity which Browne expresses so beautifully in these two meditations ['Urn Burial' and 'A Letter to a Friend'] has not been meted to his own. 'Who knows the fate of his bones or how often he is to be buried?' he asks. In 1840, while workmen were repairing the chancel of St. Peter Mancroft, the coffin of Sir Thomas was accidentally opened, and one of the workmen took the skull, which afterwards came into the possession of Dr. Edward Lubbock, who deposited it in the Museum of the Norfolk and Norwich Infirmary. When I first saw it there in 1872 there was on it a printed slip with these lines from the 'Hydriotaphia': 'To be knaved out of our graves, to have our skulls made drinking-bowls, and our bones turned into pipes, to delight and sport our enemies, are tragical abominations escaped in burning burials.'¹

He must have written promptly to W. A. Johnson, who replied on February 5th, saying :

... I would have liked to have been beside you while examining what remains of old Sir Thos. Browne. How markedly England does differ in that particular from this Country. Though we could put the whole Island into one of our Lakes yet there is more local interest in any one parish than there is in the whole of our Dominion. Say what people will about pictures, emblems, relics & the like, they have ever been and ever will be the most delightful & I think reasonable means of raising the thoughts to higher & holier hopes. The more I use them the more I delight in them. Word painting according to some eminent men in England is all that is needed but I think they must mean '*needed*' for wiser heads than mine. These things do help meditation so much, even if they do not actually create it. For instance, how difficult it is to *recall* the warmth of feelings we experience when actually in sight of relics connected with great names or events. Such I suppose is the legitimate use of the crucifix. It certainly is a lively incentive to meditation & a wonderful help to it. We protestants do not know half enough of these things, or how to use them.

From W. O. to his mother.

February 12th [1873].

My dear Mother,—Last weeks letter sent to you 'did not count', it was but a scrap; so that this one goes to you by proper turn.

¹ The 'Religio Medici.' An address delivered at Guy's Hospital. London, Chiswick Press, 1906, 31 pp. 8vo.

A mail arrived to-day with one letter from Chattie of Jan. 3rd & some papers. . . . I finished the afternoon by going to the Misses Bovell and had a long chat with them about West Indian friends. They hear from the Doctor very regularly and report him very busy, having three Parishes to attend and four Sunday Services. I did intend to go out to Putney on Sunday to see the Atwell Francis's but it was such a dreary bleak day that I postponed it, Browne and I spending a quiet Sunday together. I went to Christ Church and after dinner took a long walk around Primrose Hill returning through the Park. The snow has quite disappeared but an occasional flurry with a lowering of the Thermometer remind me that it is winter time. London is much agitated just now over the coal question, the prices having got up last week to 53s. per ton & a still further advance is talked of. As we only have our fire in the morning and evening it does not fall so heavily but what the poor will do if the weather gets much colder it is difficult to say. To-day has been remarkably clear and fine and as it was one of my days at the Brown Institution, I enjoyed the bright view—not often seen—on the river; going up on one of the Boats. . . . I send the 'John Bull' of this week to the Pater. Ask him to pass it on to J. Babington. I got it thinking it would contain a full account of the Athanasian Creed defence meeting, but you will see all about that in last week's Guardian. I am glad you have a 'slavey' that promises well; Even in England they are not immaculate judging from the complaints one hears. . . . Your most affectionate Son

WILLIE.

So the winter passed, by no means always with 'clear and fine' days, for he wrote to his sister a few weeks later: 'My cold is much better but I cannot dispense with "wipes" yet. We have had three or four days of cold yellow fog, not very thick, but horribly stuffy and it penetrates into all the rooms, chilling ones vitals'; and he adds in a postscript: 'I send B. B. a "Telegraph" with Gladstones speech in it. Tell him to excuse the dirty condition but I rescued it from the pile which the slavey collects to light fires' &c.

A paper on the results of some experimental studies undertaken earlier in the winter was read, as he later confessed, 'in a state of Falstaffian dissolution and thaw', on May 16th before the Royal Microscopical Society, and subsequently reported and published in its journal.¹ It

¹ 'On the Action of Certain Reagents—Atropia, Physostigma, and Curare—on the Colourless Blood-corpuscles.' *Quarterly Journal of the Microscopical Society*, 1873, xiii. 307.

represented an effort to determine whether the antagonism between atropin and physostigmin could be demonstrated by the behaviour of colourless corpuscles under the microscope; and though the findings were negative they served to arouse an interest in studies of the blood, which was to bring results later on. Incidentally the paper led to his election as a member of the Society. His laboratory notebook indicates that in June he had started on a new quest, for beginning with the date 14/6/73 the entries are accompanied by drawings labelled 'Colourless elements of my blood'. In the course of this investigation he very soon ran across some peculiar globoid bodies which he attempted to illustrate, and on certain days he found them 'very plentiful'.

10/6/73. After fasting 15 hours examined 3 preparations of my blood. Granular white corpuscles were found; 2 in two of the slides, none in the third. Fig. 5 represents the appearance of one which looks degenerated.

The blood of other people in the laboratory was also examined, and of various animals—modified by feeding, by fasting, &c. :

On the 21st from Mr. Schäfer's blood one or two masses like Fig. 1 above seen [sketch]. The mass under observation on a warm stage was at first rounded in outline and distinctly corpuscular. Within two hours it had become more irregular in shape, while about it were several bacteria in active movement; connected with it were small filaments. Unfortunately as a higher power was being adapted it was lost.

He continued to describe and picture what he thought to be bacteria developing from these masses; and later on many patients were examined—cases of Addison's disease, malaria, diabetes—and he succeeded in demonstrating the masses he had discovered in many different conditions. These studies occupied his time from June to October, and this summer's work was the basis of his first and possibly his most important contribution to knowledge. Though a few previous investigators had observed these bodies, which came to be called blood platelets, or the third element of the blood, and which play an important rôle in the phenomenon of clotting, they had never before been

so thoroughly studied, and none of his predecessors had actually seen them in the circulating blood. The observations, which had been conducted with great originality and been carefully described, were assembled the next spring on his return from the Continent, when Sanderson presented them before the Royal Society. News of this discovery must have reached Montreal, for in his introductory lecture on the opening of McGill in October, Palmer Howard spoke as follows in the course of his address :

In connection with this new subject of scientific interest, the older students present, as well as my colleagues, will be pleased to hear that Dr. Osler, who graduated here in 1872, has just made a discovery of great interest, and that promises well for the future of our young countryman. . . . I wish that some friend of this University would endow a Chair of Physiological and Pathological Histology, and that our young friend might be invited to accept the appointment and devote himself solely to the cultivation of his favourite subject, and at the same time bring honour to himself and to Canada.¹

Before leaving England for the Continent, Osler evidently struggled over the preparation of a letter to one of the Canadian medical journals, a rough draft of which is preserved. It contains an apology for not having followed the example set by Arthur Browne in sending a monthly letter, and ends with an expostulation regarding the waste of time and money spent by most of his young countrymen in 'grinding' to pass the English qualification examinations: these he calls neither degrees nor honours, and advises young Canadians to devote themselves to hospital work rather than to waste their substance in this way. This has a familiar sound to those who know of his later feelings regarding these examinations. Despite these unpublished expostulations, he nevertheless succumbed to the usual custom and not only became a Licentiate of the College in this year, but in 1878 took the examination for and was given his M.R.C.P.

To his sister, Mrs. Gwyn, from W. O.

October 8th [1873].

My dear Chattie,—How good I am to you—so undeserving—is evidenced by the enclosed. It differs from the Mothers so if she likes yours best—(which I dont) give it her. Folks here think it good

¹ *Canada Medical and Surgical Journal*, 1873-4, ii. 208.

but it is too stern to please me. I bid goodbye to London next Wednesday. Address me till you hear further 'Poste Restante, Königs Strasse, Berlin'. I dare say there will often be slight irregularities but I will write some one weekly. I took your boys Photo down to the Boyds last week. They did make a row over it. The servants had it in the Kitchen & all decided it was like its dear Grandfather [Osler]. Thats one on the Governor—wont he be flattered. By this time Edmund has I hope arrived & you have got that Service book at last. I dine at the Sheppards tomorrow—have my hands full in that line for the week. Tell Jennette she shall have the first Berlin letter or Hamburg probably as I shall be there on the mail day, though it is not unlikely I may miss next weeks post, but I will try not to. I am rather sorry to say goodbye to London; it is not a bad place to spend a year in & have picked up a wrinkle or two which will I trust be useful. With benedictions, Yours

WILLIE.

Berlin

In a fragment of what appears to be a journallesque home-letter written during his early days in Berlin, he states: 'The politeness here is overwhelming, they bow you in and out and seem in agony till you are seated, while in meeting hats come wholly off. In rising from a table a man will stand and make a bow to every individual he has addressed and even to a perfect stranger if he has been alone in a room with him. It looks well and I like to see it'—and he goes on to tell of his old landlady, and getting settled, and the picture-galleries, and a visit to Charlottenburg on a Sunday afternoon. It became his established habit in later years to send for the home consumption of his fellows, an open letter to the editor of some medical journal, wherein his impressions of the foreign clinics he visited were picturesquely jotted down. And though dissatisfied with his effort to compose a letter from London, he managed to write one from Berlin dated November 9th¹ in which he gives an account of the men he had seen in the clinics and elsewhere, and of the life which he and Stephen Mackenzie his new friend were leading. He comments also on matters of domestic economy which struck him as strange, particularly the breakfasts, and the beds—'wretched agglomeration of feathers—no sheets, no blankets, no

¹ *Canada Medical and Surgical Journal*, 1873-4, ii. 231.

quilts—but two feather beds, between which you must sleep and stew, but I am now reconciled’.

From W. O. to his sister, Mrs. Gwyn. 44 Louisen Str. N. [Berlin],
November 23rd, 1873.

My dear Chattie,—Your letter of last week was very acceptable, for home news still comes in a jerky, erratic manner very different to the regularity of the mail in London. Dont address any more letters to Berlin but to the ‘Allgemeines Krankenhaus’, Vienna, indeed I should have told you before, for I go on there about the end of next month. This ought to reach you about the 10th of December, just too late to offer ‘many happy returns of the day’. How old we are getting! Even I am nearly a quarter of a century old and not on my own legs yet. . . . Thanks for the offer of hair but I prefer to cut locks for myself—from heads, also, of my own choosing. Talking about hair, it is a pity you cannot see my progressing imperial, with which I look like a cross between a Frenchman & an American. I am usually taken for the former, and to my disgust get ‘Monsieured’ or else asked interrogatively ‘französisch?’ and when I answer ‘englisch’ I can see it sometimes shakes the faith of an individual in his notions of national physiognomy. My friend Mackenzie is one of those red faced, stout, sandy-haired Englishmen whom no one could mistake, so that we are rather a contrast. In other respects also we are opposites, for he is an out and out Radical in Politics, Religion, & every thing else so that we are constantly at logger heads. However he is a hard working chap and we have but little time to dispute about our differences & get on very well together, with the exception of a rub now & then. Three Edinburgh graduates turned up, nice fellows, but we do not see much of them. The weather has been unpleasant for the past week & yesterday we had our first snowstorm, which lasted all morning, while to-day—Sunday—it has rained incessantly. On Thursday night I had a great treat in the way of Music, & I suppose it would have been a still greater one if I had had a more educated ear. It was at one of a series of nine concerts given annually by the Emperor’s Orchestra in the Royal Concert room of the Opera house. I went with my friend Dr. Gutterböck who had tickets for the series. There were over a hundred performers all of whom are paid by the old Kaiser and many among them are well known composers. The Music was strictly classical, Beethoven & the like, somewhat over my head but very grand. I was as much interested in the people as anything for the elite of Berlin chiefly composed the audience. Dr. G. pointed out most of the swells all with outlandish names, with which I will not trouble you. Undoubtedly the women are far from good looking yet trim & neat withal. Why don’t you girls do your back hair in a Christian style? it looks so much better plainly braided without all

that horsehair padding, &c. The old ladies were even worse in point of features than their daughters. Four within my immediate ken could with a slight alteration in dress have sat for 'Sairy Gamp'. The audience was evidently a most appreciative one and knew what good Music was. I varied my programme this morning by going to the American chapel, where they have not any fixed person to officiate but depend on chance for some one. It is a dissenting service, not at all bad of its kind, and the young man—a theological student—who preached was an improvement on our steady-going old black-gownier at the English chapel. The congregation was not very large but thoroughly American. Usually on a Sunday we dine out as it were, i. e. we do not go to our accustomed place, but to some Restaurant in the Linden and then adjourn to some Conditorei to see the Papers. Our favourite one is Spalangani's, but it is so much frequented by Englishmen that it is often difficult to obtain a paper. I take my news 'weekly', generally through the illustrated. . . . My old woman has just been in and on a Sunday night usually gets very communicative, entering fully into family history, &c. Her Mother was the chief theme this evening and she seemed very proud to be one of fifteen children which that remarkable woman presented to her unhappy Fritz—she laid particular stress on this point—with praise-worthy regularity. . . .

25th. Have you heard or seen anything lately of Mr. Johnson? You should pay him a visit and take the lad along. . . . Dont let your heart be troubled about German Theology. I dont want it, though some of it may be good enough, even if a little unorthodox. My hands are full without anything else outside ordinary Medical subjects. Love to all -Yours, &c.

WILLIE.

Another long letter was sent off at this time,¹ evidently written before the sanitary reforms instituted by Virchow came to transform Berlin :

Berlin, Nov. 25th [1873].

Nature could hardly do less for a place than she has done for this. A barren, sandy plain surrounding it on all sides without a vestige of anything that might be called a hill ; and the muddy, sluggish Spree, just deep enough to float barges, flowing through it towards the Baltic, form the sole natural features. Being a modern city it is well laid out, with wide but wretchedly paved streets ; while the houses, though of brick, are stucco-covered and uniform, so that the general appearance of the place is clean. Unfortunately the cleanliness goes no farther than looks, being the very opposite in reality. The drainage is everywhere deficient, and in the greater part of the

¹ To the *Canada Medical and Surgical Journal*, 1873-4, ii. 308.

city the sewers are not even covered but skirt the pavement on each side, sending up a constant odour, which until one gets acclimatized is peculiarly disgusting. The Berlinese have, however, at last roused themselves, and the council has voted two millions sterling for sanitary purposes, so that a striking reduction in the present high death-rate from Typhoid and kindred diseases may be shortly expected.

It would be superfluous to speak of the advantages here offered for medical studies, the name of Virchow, Traube, and Frerichs in medicine and pathology; of Langenbeck and Bardleben in surgery, of DuBois-Reymond and Helmholtz in Physiology and Physics are sufficient guarantees; all of these men, who though they have been prominent figures in the medical world for a long time, are still in their prime as teachers and workers. In contrast to London, where the teaching is spread over some twelve schools, it is here centralized and confined to the Royal Charité,—for though there are several smaller hospitals in the city, yet they have no schools in connection with them, but are used chiefly for training nurses. . . . There are only three or four Americans here, and the same number of Englishmen. They go chiefly to Vienna, where greater advantages are offered in all the specialties. The native students seem a hard-working set, much given to long hair and slouched hats, and a remarkable number of them wear glasses. They possess the virtue, quite unknown as far as my experience goes, among their English or Canadian brethren, of remaining quiet while waiting for a lecture, or in the operating-theatre. There is never the slightest disturbance, though most of the lecturers give what is called 'The Academical quarter', that is they do not begin till fifteen minutes past the appointed hour. At Langenbeck's Clinique only, are students allowed to smoke, and often by the time a patient is brought in the condition of the atmosphere is such that as you look across the large theatre from the top, the men on the opposite side are seen through a blue haze. Quite a number of the students, more than I expected, are badly marked with sword-cuts received in duels. One hopeful young Spanish-American of my acquaintance has one half of his face—they are usually on the left half—laid out in the most irregular manner, the cicatrices running in all directions, enclosing areas of all shapes—the relics of fourteen duels! The custom has decreased very much of late, and is now confined to a few of the smaller university towns. A great diminution has taken place in the attendance here within the last few years, and I am told it is greater than ever this session, due to the increased cost of living. Speaking from a six weeks' experience, I find it quite as dear as London. Field-sports, such as cricket and football are entirely unknown among the students; but they have a curious habit of forming small societies of ten or twelve, who have a room at some restaurant where they meet to

drink beer, smoke, and discuss various topics. If tobacco and beer have such a deteriorating effect on mind and body, as some of our advanced teetotallers affirm, we ought to see signs of it here; but the sturdy Teuton, judging from the events of the past few years has not degenerated physically, at any rate, while intellectually he is still to the fore in most scientific subjects; whether, however, in spite of—or with the aid of—the ‘fragrant weed’ and the ‘flowing bowl’ could hardly be decided. Drunkenness is not common, at least not obtrusively so, but they appear to get a fair number of cases of delirium tremens in the Charité. . . .

From this he went on to describe in what way the method of clinical instruction differed from the English and Scotch schools, and the methods of those two great teachers, Traube and Frerichs, particularly appealed to him:

But it is the master mind of Virchow, and the splendid Pathological Institute which rises like a branch hospital in the grounds of the Charité, that specially attract foreign students to Berlin. This most remarkable man is yet in his prime, (52 years of age), and the small, wiry, active figure, looks good for another twenty years of hard work; when one knows that in addition to the work at the Institute, given below, he is an ardent politician, evidently the leader of the Prussian Opposition, and a member on whom a large share of the work of the budget falls; an active citizen, member of the Council, and the moving spirit in the new canalization or sewerage system; an enthusiastic anthropologist as well as a working member in several smaller affairs, some idea may be formed of the comprehensive intellect and untiring energy of the man. On Monday, Wednesday and Friday from 8.30 to 11 he holds his demonstrative course on pathology, the other mornings of the week the course on pathological histology, while on the fourth day at one o'clock he lectures on general pathology. Virchow himself performs a post-mortem on Monday morning, making it with such care and minuteness that three or four hours may elapse before it is finished. The very first morning of my attendance he spent exactly half an hour in the description of the skull-cap!

On Wednesday and Saturday the demonstrations take place in a large lecture-room accommodating about 140 students, and with the tables so arranged that microscopes can circulate continuously on a small tramway let into them. Generally the material from 10 to 12 post-mortems is demonstrated, the lecturer taking up any special group and enlarging on it with the aid of sketches on the blackboard, and microscopical specimens, while the organs are passed round on wooden platters for inspection. A well provided laboratory for physiological and pathological chemistry also exists as well as rooms where men may carry on private investigations; and a library

and reading-room is now being fitted up. A description of some of the other classes and things of interest must be reserved for another time.

The contents of this long letter were built up from the careful notes kept in a *Tages-Kalender* with such care as his difficulties with the language permitted: but his detailed notes of what he was seeing of the clinics and above all of Virchow's painstaking autopsies, were to stand him in great stead on his return. Later on, this same *Tages-Kalender* contains some daily entries regarding a brief illness which sounds like influenza, the last of which reads: 'Dec. 13, Saturday. Much better, up most of the day, ate a good dinner; finished "Adam Bede". Evening no headache nor any pains but felt a little weak.'

Throughout his life Osler always took sufficient interest in his own maladies to make notes upon them, usually entered in his account-books, and, what is more, always took advantage of being laid up in bed to surround himself with books and to catch up on outside reading. It was in this way that he came invariably to 'enjoy' one of his recurring attacks of bronchitis in later years. The last of the Berlin entries was made on December 18th, but the subsequent pages of the *Kalender* contain many quotations from books he had been reading—from Tyndall, from Poincaré, from 'The Two Gentlemen of Verona' etc.

On the 24th of this same December there died in Baltimore a wealthy merchant, Johns Hopkins, who bequeathed his property 'to foster higher education'. Little did the young student, just completing a short three-months' sojourn in Berlin, realize the part he was to play, sixteen years later, in the establishment of a medical department provided for under this great foundation.

Vienna.

Such daily entries as any young man of good intentions, in a foreign country and with a new note-book in his pocket, might undertake to write and soon abandon, appear in a *Geschäfte-Taschenbuch* for 1874:

January 1. Arrived at Vienna last night, put up at Hotel Hammerand, explored the city in the morning and in the afternoon.

With Schlofer's aid went in search of lodging-house, deciding finally on a room at Herr von Schultenkopf, No. 5 Reitergasse, Josefstadt, Thur. xiii.

January 2, Fr. Continued the survey of the city. Saw St. Stephen's Church and the chief business localities. Visited the Allgemeines Krankenhaus with Schlofer and tried to get some idea of its topography—rather difficult matter.

January 3. Visited the Krankenhaus again and made further exploration in the city.

4th, Sunday. Tried to find the English Church, but failed. Spent the rest of the day with Schlofer and his friend Herr B.

5th, Monday. Went to meet Hutchinson at the Nordwestbahnhof. Had the felicity of going to 5 of the 7 stations in the city in search of his trunk.

6th, Tuesday. Went to the Krankenhaus and afterwards walked round the Ring.

7th, Wednesday. Commenced work with Bamberger at 8.30. Neumann at 10. Wiederhoffer at 11, and Braun from 12 to 2. Much pleased with this my first introduction to Vienna teachers and material.

For the five months in Vienna he must have worked assiduously and have filled up his time with all the courses he could squeeze in, as the following account he sends home to the Canadian journal¹ makes evident :

March 1st, 1874.

'Allgemeines Krankenhaus'.

... I left Berlin on the 29th of December, and stopped at Dresden for a few days, to see the galleries there, which pleased me very much, and then continuing my journey I arrived here on New Year's day. With the aid of a Yankee friend, I soon obtained a room in Reitergasse, close to the Krankenhaus. The Krankenhaus is arranged in nine courts, occupying a whole district in the city, and accommodating more than two thousand patients. We were not long in getting to work, and our daily programme is as follows :

At about half-past eight we go to Hebra, who visits his wards at this hour, and at nine we go to his lecture-room. Undoubtedly he is the lecturer of the Vienna School, and he combines the humorous and instructive in a delightful way. I generally go every other morning to Bamberger, who lectures at the same hour, on General Medicine. He is a splendid diagnostician, but is, I think, inferior to those Berlin giants, Traube and Frerichs. At ten we have another hour on the skin, from Neumann who has the run of Hebra's wards, and an out-patient department of his own. He enters more par-

¹ The Canada Medical and Surgical Journal, 1873-4, ii. 451.

He must have seen all his old friends in London, have visited Schäfer at Elstree, and have gone to Cornwall to see the family relations there; and when he sailed on the 7th he brought out with him 'the young girl of 84'—Mary Anne Pickton, his mother's sister, who was henceforth to share the family home in Toronto. On the fly-leaf of John Henry Newman's 'Verses on Various Occasions', a volume still in his library, Osler had written in a later hand:

This copy was given to my Aunt, Miss Pickton, of Edgbaston, Birmingham, by Cardinal Newman, with his photograph. She gave it to me in 1884, the year I brought her out to Canada. She and the Cardinal were exactly the same age. The additional verse to The Pillar of the Cloud [i.e. Lead, Kindly Light] at p. 152 is in her handwriting.

It is probable that during the voyage he found time to write the 'Notes of a Visit to European Medical Centres', which was published shortly after.¹ It is a *résumé* of his impressions, and concludes with this significant paragraph which shows the direction in which his thoughts were leading him—away from the pathological institute and from comparative pathology to the ideal clinic which became his goal:

The custom of placing one or two men in charge of a large hospital seems odd to us and has both advantages and disadvantages. Thus, Dr. Guttman is responsible to the city authorities for the care of about 350 patients at the Moabit institution and is, of course, allowed a staff of assistants on whom necessarily a large proportion of the work falls, and in some cases the treatment is entirely in their hands. At the city hospitals the rotation of assistants is much more rapid than at the University clinics, where they gladly remain for years at small salaries for the sake of the opportunity of making reputations as clinical workers. At the Charité the wards of Frerichs, Leyden and Westphal are clinical laboratories utilized for the scientific study and treatment of disease, and the assistants under the direction of the Professor carry on investigations and aid in the instruction. The advanced position of German medicine and the reputation of the schools as teaching centres are largely fruits of this system.

It was while he was at sea that the Editorial Board of the *Medical News* saw fit to make an announcement in their

¹ Editorial. *Archives of Medicine*, N.Y., 1884, xii. 170-84.

appointment? issue of 9th August of Osler's candidacy. This note was promptly quoted broadcast, so that by the time of his landing, the cat was well out of the bag. The Canadian Medical Association met at Toronto, August 25th to 27th, the most notable feature of the meeting being a long and, be it said, contentious address by Lawson Tait on the subject of abdominal surgery then in its infancy—and it is over infants that their sponsors become quarrelsome. It may be assumed, however, that Osler at the mercy of his friends was nevertheless the centre of the gathering. The paper he had planned to read on 'Pneumonia as a Contagious Disease' was given only in abstract ; and on the last day of the meeting, Roddick, who read the Report of the Nominating Committee, gave the name of Osler as the next President and of James Stewart to be his successor as General Secretary ; and it was reported that 'with singular unanimity Dr. Osler was elected'.

S/ It was a lively ten days, for the meeting of the British Association followed immediately after. At this gathering Osler's interests naturally lay with the physiological section, a long report of which he sent off for Minis Hays's columns.¹ The chief participants were Newell Martin and Howell from the John/Hopkins Biological Laboratory ; C. S. Minot and H. P. Bowditch of Boston ; his pupil, Wesley Mills, and his old friend Edward Schäfer, who presided and took an active part in the programme, among other things reporting some experiments on cerebral localization carried out with Victor Horsley.²

His time of departure was drawing near and he was subjected to the usual series of tributes : appropriate resolutions were passed by the societies of which he was a member ; there was a farewell celebration at the Dinner Club ; minutes of congratulation were passed by the McGill Faculty upon 'his recognition by a distinguished

¹ *Medical News*, Phila., Sept. 27, 1884, xlv. 360-3.

² Among the British visitors were Drs. Struthers and Cunningham, Professors of Anatomy at Aberdeen and Dublin respectively, who subsequently visited the leading schools of Canada and the United States. Dr. Struthers on his return gave a full account of his impressions—a sorry picture of the conditions of medical education then existent in the States, conditions not yet entirely overcome.

foreign university'; and due acknowledgement made of his services as professor and of the 'admirable and efficient manner in which during the past seven years he has performed the important duties of Registrar'. Finally, on the eve of his departure, a large complimentary dinner, at which Palmer Howard presided, was given at the Windsor Hotel. The students themselves, not to be outdone, presented him with a handsome hunting-case watch, suitably inscribed, and they will be glad to know it was the watch he always wore.

So McGill lost what Howard called its 'potent ferment'; and thus closed Osler's Canadian period. He was thirty-five years of age, at the mid-point of his life, as it proved, though his expectancy at that time, in view of his ancestry, was for a longer tenure than is vouchsafed most men. Such a transplantation from one university to another of a clinician at the height of his career, though common enough in Europe, was unusual in America, and it caused a great deal of comment—favourable, be it said, on all sides. Still, even in America, there was ample precedent, as in the case of Nathan Smith, Dunglison, Gibson, Elisha Bartlett, Bartholow, Flint, Gross, and more besides. Nevertheless there was something different about Osler's call, for it represented the choice of a young man, known more for his scientific papers and his interest in research than for any proved clinical ability. Time has shown that such a preparation is often the best, though the appointment of laboratory-trained men to clinical positions often raises an outcry.

Unwilling to let go entirely, and trusting perhaps that the experiment might not succeed, the McGill Faculty at their meeting on September 3rd had voted him a six-months leave of absence, and his resignation was not officially accepted until October 11th, when final resolutions of regret were passed. Their hopes of his return were vain; and though in later years later he was often urged to do so, it was not to be. But he was never forgetful of what he owed to Johnson and Bovell and Howard; to the microscope and the pathological laboratory; to the Montreal General and to his Canadian friends.

What particularly lured him is difficult now to tell. It

may even have been difficult for him to tell. For a person capable of such strong local attachments there is something contradictory about it. A great career was assured in Montreal whereas Philadelphia was an uncertainty, in a land more foreign to him than England. The singularity of the call may have influenced him; and an ancestral impulse which bade him accept. He possibly realized that his bent lay in the study of disease as it was seen at the bedside rather than in the laboratory. As W. T. Councilman has said :¹ 'He could easily have become a great scientist, but he chose the path which led to the formation of the great clinician which he became; a worthy associate of the great men who have made English medicine famous.'

During the short span of years since his McGill appointment he had stirred into activity the slumbering Medico-Chirurgical Society; he had founded and supported a students' medical club; he had brought the Veterinary School into relation with the University; he had introduced the modern methods of teaching physiology; had edited the first clinical and pathological reports of a Canadian hospital; had recorded nearly a thousand autopsies and made innumerable museum preparations of the most important specimens; he had written countless papers, many of them ephemeral it is true, but most of them on topics of live interest for the time, and a few of them epoch-making; he had worked at biology and pathology both human and comparative, as well as at the bedside; he had shown courage in taking the small-pox wards, charity in his dealings with his fellow-physicians in and out of his own school, generosity to his students, fidelity to his tasks; and his many uncommon qualities had earned him popularity unsought and of a most unusual degree.

Years later, in an address² given at McGill, while admitting that 'the dust of passing time had blurred the details, even in part the general outlines, of the picture', Osler spoke of this formative period of his medical career as one 'during which he had become a pluralist of the most abandoned

¹ *The Johns Hopkins Hospital Bulletin*, July 1919, xxx. 197.

² 'After Twenty-five Years.' *Montreal Medical Journal*, 1899, xxviii.

sort', and concluded his interesting and amusing recollections by saying :

After ten years of hard work I left this city a rich man, not in this world's goods, for such I have the misfortune—or the good fortune—lightly to esteem ; but rich in the goods which neither rust nor moth have been able to corrupt, in treasures of friendship and good-fellowship, and in those treasures of widened experience and a fuller knowledge of men and manners which contact with the bright minds in the profession ensures. My heart, or a good bit of it at least, has stayed with those who bestowed on me these treasures. Many a day I have felt it turn towards this city to the dear friends I left there, my college companions, my teachers, my old chums, the men with whom I lived in closest intimacy, and in parting from whom I felt the chordæ tendinæ grow tense.

PART II
THE UNITED STATES, 1884-1905

CHAPTER XI

FIRST YEARS IN PHILADELPHIA

OSLER's Philadelphia period began with his arrival on Saturday afternoon, October 11th, 1884, at a family hostelry which then and since has enjoyed the bookish appellation of the Aldine Hotel. The name, for obvious reasons, had been given by Mr. Lippincott the publisher, who had purchased what was formerly a residence and transformed it into a lodging-house in 1876 for visitors to the Centennial Exposition. The place had seen better days, ones indeed of society and fashion when in the '50's it had been the suburban home of the son of Benjamin Rush; and though residential Philadelphia has long tended to confine itself within much the same boundaries, 20th and Chestnut Streets were in the '80's far from being suburban. It was one of those off-years when even October brings a spell of sultry weather, which must have been an unhappy contrast to the cool Province of Quebec for a lonesome man searching the heart of Philadelphia for a place to reside. In his account-book of the period he has laconically written opposite Tuesday, October 21st: 'Came to 131 S. 15th Street,' and there follows a list of what appear to have been the dinner engagements to which custom subjected the new-comer: 'Oct. 28, Sinkler; 30, Musser; 31, Seiler; Nov. 2, Sun., Gross at 2 p.m.; 10, Brinton; 14, Pepper dinner at 7 p.m.; 17, Brinton ditto; 23, Weir Mitchell 7 p.m.; 25, Dinner at Pepper's; 26, Faculty; 27, Thanksgiving Dr. Tyson; 28, Wood; 29, Mrs. Longstreth.' Here the entries end.

No. 131 South 15th Street where he was to live alone for three years was a narrow, fifteen-foot, three-story brick house of the mongrel type of Philadelphia domestic architecture of about 1830, with basement windows on a level with the pavement, a high flight of steps to the front door, and an area-way beneath. It was one of a row of similar houses crowded in the block south of Chestnut Street where

the Union League Club now stands. Osler occupied the two ground-floor rooms; an office in front lined with bookshelves, and a waiting-room behind similarly lined. Among them some one remembers Jowett's 'Plato' in gaudy binding, and also that there were many medals and ribbons, relics of his former athletic prowess, that decorated the mantel. It was a wee establishment—probably kept none too tidy by its good-natured owner, Otto Hansen, a caterer, who lived upstairs, got his tenant's breakfast for him and otherwise tended to his simple wants. One of these was that books and papers should be left where deposited, whether on table, chairs or floor. This must have been easy for Otto.

Though his advent had been much heralded, little was known about him, as is evident from a story told of old Dr. D. H. Agnew, a devout person of Scotch-Irish ancestry, who wrote and asked if Dr. and Mrs. Osler would not share his pew in the Second Presbyterian Church the following Sunday. When Osler was ushered in unaccompanied, Agnew whispered regrets that he was alone, whereupon Osler's mischievous half got the better of him. He merely raised his eyebrows and finger, which was interpreted by Agnew—and circulated—that the new-comer's wife was 'expecting'.

So far as the students were concerned, there can be no doubt that their first impression was one of disappointment. No polished declamations with glowing word-pictures of disease, such as they had listened to from Stillé and Pepper, and for which indeed the Philadelphia school was famed, came from this swarthy person with drooping moustache and informal ways, who instead of arriving in his carriage, jumped off from a street-car, carrying a small black satchel containing his lunch, and with a bundle of books and papers under his arm; who was apt to pop in by the back door instead of by the main entrance; who wore, it is recalled, a frock-coat, top hat, a flowing red necktie, low shoes, and heavy worsted socks which gave him a foreign look; who, far from having the eloquence of his predecessor, was distinctly halting in speech; who always insisted on having actual examples of the disease to illustrate his weekly

discourse on Fridays at eleven, and, as likely as not, sat on the edge of the table swinging his feet and twisting his ear instead of behaving like an orator—this at least was not the professor they had expected.

It is said of Pepper that, with great dignity but conveying the impression of having no time to spare, he would enter the classroom while taking off gloves and coat, and immediately begin a brilliant discourse on some topic, not always related to his prescribed subject. Osler, on the other hand, could be dignified enough and serious, but playfulness and gaiety were always ready to break through the mask. Moreover, anything suggesting the *poseur* was foreign to his make-up and there was no concealment of the fact that he felt the need of elaborate preparations for his more formal student exercises.

But it was a horse of another colour when the students came in contact with Osler in the wards, for the bedside instruction such as he was accustomed to, was an undeveloped feature in the Philadelphia school. He shared with Pepper in the University Hospital the two large medical wards (B and D they still remain), but Pepper, though the head of the medical department and engaged in a large private practice, was Provost of the University as well, actively at work adding to its resources. Hence he rarely appeared except to give his accustomed lectures, so that Osler had these wards almost to himself; and in them, with an increasingly enthusiastic group of students about him, he was to be found the larger part of each morning during this first year and until greater opportunities took him elsewhere for his main bedside visits.

Among the young clinical men at this time, original study or research of any kind was almost unknown, and even had any sign of an investigative spirit been present there were no facilities for its development. For this, Osler's enthusiasm soon made an opening; almost within a month of his arrival he had rigged-up a small clinical laboratory under a part of the hospital amphitheatre, and there amid surroundings as unpromising as the students' cloak-room at McGill he is said to have soon 'produced an atmosphere so encouraging and helpful that young fellows trooped to his

side'. This was a new experience to the senior students who had previously been fed largely on graceful generalizations concerning disease, delivered from a platform. As one of them has said, it was like 'a breath of fresh air let into a stifling room', and disappointment soon gave way to devotion. Of this time Howard A. Kelly has written¹:

I was living in Philadelphia up in the big mill district of Kensington, culling a surgical out of a large general practice, and at the same time keeping in close touch with things at the University of Pennsylvania, for eight years my college, when it became manifest that some fresh and stirring blood had entered the college life. The university, with so many eminent men camping on her very doorstep in Philadelphia, and with that tendency to nepotism—a form of paternal pride seen in all successful institutions—had, as we younger men thought, driven John Guit  ras of brilliant promise in general medicine, away from her doors to protect Pepper from rivalry, and now, not without great hesitation as we understood, she had actually broken her shackles, thrown traditions to the winds and pulled William Osler down from McGill. Fresh invigorating currents of life and new activities in our stereotyped medical teachings began at once to manifest themselves, and every sturdy expectant youngster in short order lined himself up as a satellite to the new star. Osler breezes were felt everywhere in the old conservative medical centre, and yet it was not without some difficulties that he securely established himself.

Medical education at the time in the States was undergoing radical changes. After the reforms at Harvard a few years before under the firm hand of President Eliot, the University of Pennsylvania was the next to follow in making a three-year medical course obligatory; and the senior students of 1884 had been the first of whom an entrance examination had been required. Some of the old faculty members, as was natural, had opposed these reforms which the younger generation, represented particularly by Wood and Tyson, warmly upheld; but the result was that there had been a painful controversy in the Faculty. Before Pepper's appointment as Provost in 1881 the medical school had been larger than the academic department; but with the stiffening of the admission requirements its numbers, as was inevitable, fell off, and this was a source of

¹ 'Osler as I knew him in Philadelphia and in the Hopkins.' *Johns Hopkins Hospital Bulletin*, July 1919, xxx. 215.

anxiety to the younger medical teachers who had favoured the change and who feared there would be a lack of financial support, particularly for the development of laboratories. All of the teachers were active in practice, with the exception of Joseph Leidy who, an eminent naturalist, was Professor of Anatomy. Harrison Allen lectured on physiology but practised laryngology for a living; Tyson, who was Professor of Physiology, taught many other things and was likewise active in practice, which was also true of H. C. Wood, Agnew, Ashurst, Goodell, and the others. A recent graduate of the period, who, though working in the pharmacological laboratory, came under Osler's influence, has since written¹:

The remarkable part of Osler's entrance was that while the report of his election raised waves of regret and indignation, his actual plunge in the pond at once had the effect of making its surface placid, and this without there being any manifest effort on his part to ingratiate himself with any one or all of the factions. He entered so gracefully and ably, and so naturally, that he seemed almost at once to be one of us, young and old. He was gracious to his elders, cordial to his contemporaries, encouraging to his juniors, and jovial almost to the point of frivolity with all; but the dominant factor that made his way successful with all hands was, to use a student phrase, 'he was up'—that is, he knew his subject and how to teach what he knew.

Osler's disinclination for a general practice, for which a university position was coveted as a portal of entry, and his determination to limit himself largely to consultations, was mystifying to his medical colleagues, most of whom were accustomed to hold afternoon office hours and to engage actively in house-to-house practice. His afternoons, on the contrary, usually found him at 'Blockley', where, as will be learned, after his morning at the University Hospital and some bread-and-milk picked up in the ward, he would betake himself with a group of students to spend the afternoon making post-mortem examinations instead of sitting in his office awaiting patients. Dr. J. C. Wilson years later, in referring to Osler's advent, said: 'First, then, we at once sought to make a practitioner of him. But of that he

¹ H. A. Hare: 'William Osler as a Teacher and Clinician.' *Therapeutic Gazette*, Detroit, Mar. 1920.

would have none. Teacher, clinician, consultant, yes, gladly; but practitioner—no! And that with emphasis.¹

Osler's newly and rapidly acquired friends were by no means limited to those of his own school, and the households he came particularly to frequent were those of S. W. Gross, Minis Hays, James Wilson, and Weir Mitchell. He testified to this in a long letter written many years later to the Jefferson medical students, just before the war, regretting that he could not pay them a promised visit:

... I owe much to the men of this school—let me tell you in what way. The winter of 1869–70 I had a bedroom above the office of my preceptor, Dr. James Bovell, of whose library I had the 'run'. In the long winter evenings, instead of reading my textbooks, Gray and Fownes and Kirkes, I spent hours browsing among folios and quartos, and the promiscuous literature with which his library was stocked. I date my mental downfall from that winter, upon which, however, I look back with unmixed delight. I became acquainted then with three old 'Jeff' men—Eberle, Dunglison and Samuel D. Gross. The name of the first I had already heard in my physiology lectures in connection with the discovery of cyanide of potassium in the saliva, but in his 'Treatise of the Materia Medica', and in his 'Treatise on the Practice of Medicine' (in the yellow-brown calfskin that characterized Philadelphia medical books of the period) I found all sorts of useless information in therapeutics so dear to the heart of a second-year medical student. Eberle was soon forgotten as the years passed by, but it was far otherwise with Robley Dunglison, a warm friend to generations of American medical students. Thomas Jefferson did a good work when he imported him from London, as Dunglison had all the wisdom of his day and generation combined with a colossal industry. He brought great and well deserved reputation to Jefferson College. After all, there is no such literature as a Dictionary, and the twenty-three editions through which Dunglison passed is a splendid testimony to its usefulness. It was one of my stand-bys, and I still have an affection for the old editions of it, which did such good service. (And by the way, if any of you among your grandfathers' old books find the 1st edition, published in 1833, send it to me, please). But the book of Dunglison full of real joy to the student was the 'Physiology', not so much knowledge: that was all concentrated in Kirkes, but there were so many nice trimmings in the shape of good stories. ...

In this vein he went on to say that he had really been

¹ Remarks at the farewell dinner to Dr. Osler, May 2, 1905. Privately printed.

brought to Philadelphia through the good offices of Jefferson men. The senior Gross, who had died only the preceding May, had been the outstanding figure of his generation in American surgery; and during his Philadelphia period, from the time he succeeded T. D. Mütter in 1856 until his death, his household was noted for its hospitality. Rarely did any waif visiting the clinics in Philadelphia fail to partake of his abundant table. In this tradition his son Samuel W. Gross had been brought up, and it was what his daughter-in-law too had come to regard as merely the customary cordiality among doctors. It was natural enough, therefore, that this couple should have called promptly on the new-comer on a Saturday evening in his forlorn rooms on South 15th Street, where they found a most homesick person pestered by mosquitoes, sweltering in the heat of a breathless October evening; and the outcome was that he took his Sunday dinner with them the following day.

This was the beginning of a great friendship, and nearly every Sunday found Osler at the Grosses' for dinner, where he often brought with him a friend or two who might be visiting Philadelphia; among them later on, Palmer Howard, Ross, and Shepherd. One of the few laments about his new environment was the want of afternoon tea for one accustomed to it, and for whom lunch was a trifling matter to be carried in the pocket or picked up haphazard in a hospital ward. But a cup of tea could be assured at the Grosses', where too, after the doctor's office hours, young people were apt to be found, and where the door would be opened at the first touch of the bell by old Morris, the smiling coloured butler, known to so many of Osler's friends in the Baltimore years to come, who was able to make an afternoon visitor doubly welcome. Moreover, 1112 Walnut Street was conveniently near the *Medical News* office, and not far from the College of Physicians Library where he usually buried himself from five to six in the afternoon.

Osler's irrepressible tendency for practical jokes was by no means uprooted in consequence of his transplantation to Philadelphia, and it cropped out frequently, particularly as an outgrowth of the 'E. Y. D.' tradition. James M. Barrie,

in his Rectoral Address delivered at St. Andrews in 1922, remarked that his puppets seem more real to him than himself, and that he could get on swimmingly if he could only make one of them deliver the address :

It is M'Connachie who has brought me to this pass. M'Connachie, I should explain, as I have undertaken to open the innermost doors, is the name I give to the unruly half of myself : the writing half. We are complement and supplement. I am the half that is dour and practical and canny, he is the fanciful half . . . who prefers to fly around on one wing. I should not mind him doing that but he drags me with him.

Egerton Y. Davis was Osler's M'Connachie—his fanciful half, who first and last got him into a good deal of trouble. As may be recalled, he first appeared on the scene with the perpetration of a joke at the expense of one of Osler's Montreal friends. At about this time Theophilus Parvin, one of the collaborators on the anonymous Board editing the *Medical News*, an obstetrician of considerable pomposity and a tempting mark for M'Connachie's, wrote an editorial on an obscure topic relating to his special field of work. This was too much for Osler's mischievous half, and a letter postmarked Montréal and signed 'Egerton Y. Davis, Ex-U.S. Army' was soon received by Parvin, commenting favourably on his editorial and citing in full a fictitious case of the sort Parvin had seen fit to discuss. Certain documents relating to a 'MS. of Egerton Yorrick Davis, M.D., late U.S. Army, Caughnawauga, P. Q.' may be found in the Osler library, and in a note prefatory to them occurs the following somewhat mystifying account of how Osler became entangled with this person :

I never could understand about Egerton Yorrick Davis. He is represented to have practised at Caughnawauga nearly opposite Montreal, where his collections were stored in the Guildhall. Some have said that he was a drunken old reprobate, but the only occasion on which I met him, he seemed a peaceable enough old rascal. One thing is certain, he was drowned in the Lachine Rapids in 1884, and the body was never recovered. He had a varied life—in the U.S. Army; in the North West; among the Indians; as a general practitioner in the north of London. I knew his son well—a nice mild-mannered fellow, devoted to his father.

These notes of customs among the Indian Tribes of the Great