To all professional men who have even a little real science, and who have been in some degree impregnated with its spirit, it is a perennial spring of the purest pleasure. Think of a tedious case, whether medical, surgical, or obstetrical, making heavy drafts on your time, your health, and your patience. What a dreary affair for you! a dreariness untouched by the fee (whether it is paid or not), a dreariness which is scarcely felt, or, if felt, is disregarded, thanks to the tender feelings of humanity implanted in your hearts by Almighty God. When science sheds its warm glow over the scene, the dreariness is gone, and in its stead you have the noble pleasure of intelligent observation and scrutiny, a pleasure bearing with it utility, not only to you, but also to your patient.

But though from science you do derive great profit, and may derive much pleasure, and dare not hope to make any adequate return, you yet may, and you should contribute somewhat. In this temple there is room for all kinds of workmen; and although we cannot, like Harvey, build a tower, or, like Hunter, raise several pinnacles, yet each of us is able, and should be proud to assist, be it only in carrying freights of bricks or hods of mortar. If you cannot do even that, you can shout to cheer and encourage those who do.

Though medical science is, in some respects, remote from medical practice, yet you cannot be good practitioners without being learned in science. The more science applicable, the better the practice. The more science in the practitioner, whether that science is applicable or not, the better, *ceteris paribus*, is the practitioner. The mere practical man, often the subject of much silly praise, is either a mistake or he is a humbug.

But who is able to describe the great practitioner—such as you should all aim at being? Such a fine admixture of qualities and powers! educated, sympathetic, strong in intellect and will and body, subtle yet simple, adaptive. Subjectively, he may be characterised, like the good student whose life he continues, as filled with love of medicine, love of his patients, love of his professional brethren. One of our greatest medical philosophers gives up the attempt to describe such a man, and resorts to the comparison with a great artist; but this is mainly an evasion, for he does not give us the qualities of the great artist, nor does anyone else. We may at least say that anyone can learn to paint a landscape, but there have been few placed beside Claude and Turner. Many can do what is absolutely necessary, very few can do it in the very best manner. Though few can fully accomplish, all can attempt. Though few greatly succeed objectively, all may be highly meritorious subjectively. All may deserve the highest honour, though few may do the best work.

In the course of this address nothing has been said of philosophy, the highest, the most engrossing, and, in some senses, the most important, certainly the most difficult, department of human activity. But it is not to be ignored, and it is mere trifling to label any department as "agnostic," or forbidden ground. Such a designation rather tempts generous spirits to overleap the barrier. The narrow scientific man may hate the insecure territory of philosophy. The presumptuous philosopher may loftily despise the prosaic ground of science, Both, so acting, do wrong. As there is sea around the solid land, and as there is sky over all, so, beyond science, there are many more or less insecure regions of philosophy which we do tread and must tread, for all men in all times have done so. "Some people (says John Murker) who would fain be esteemed wise in their generation, tell us that our belief endeth where mystery begins. What! (he adds) will anyone tell me that travelling stops where the sea begins?" No, we are all travelling far beyond the secure land of science. Each of us trims his little bark and puts out to sea, gazing at the stars as he goes. You have to do so; nay, you are indeed now doing so, and you are not to be discouraged, far less to stop; but you should be modest in your attempts, humble and circumspect in your proceedings. When you lose sight of land you may still proceed, sure to escape from shipwreck if you have as your guide the pole-star shining in the sky of eternal truth.

AUSTRALIAN HEALTH RESORTS.—Mr. Bruck, of Sydney, New South Wales, is preparing a work of reference on the health resorts of Australia, Tasmania, and New Zealand. It will contain articles on climatology, and will give a full account of the numerous mineral springs and bathing places of Australia, with a special article on the thermal springs of New Zealand.

The foundation-stone has been laid of a new cottage hospital which is to be erected at Ashburton at a cost of £1,241.

OLIVE OIL.—The oil yielded by the olive plantations recently established in South Australia and Victoria is reported to be of excellent quality. This is an entirely new enterprise for these colonies, and promises to develop into an important industry.

AN ADDRESS ON THE MEDICAL PROFESSION; ITS HARDSHIPS AND ITS REWARDS.

*Delivered at the Opening of the Winter Session at St. Mary's Hospital,
October 3rd, 1887.*

By ANDERSON CRITCHETT, M.A. CANTAB.,
Ophthalmic Surgeon to, and Lecturer on Ophthalmic Surgery
at, St. Mary's Hospital.

HAD Dante written in the nineteenth century his magic pen might have done justice to the sufferings of those unfortunate members of our profession who, possibly by way of atonement for errors in diagnosis and faults in treatment, are condemned to pass their short vacation in a vain endeavour to infuse some interest and originality into an introductory lecture. I readily acknowledge, however, that for my own poor part, although for some weeks past I have languished under this cloud of work, it has not been without a silver lining, for I am enabled on my own behalf and on that of my colleagues to offer a cordial and hearty welcome, at the opening of our winter session, alike to those who have already borne with us the heat and burden of the day and to the new recruits who now join our ranks for the first time. I know that I rightly interpret the feelings of the staff when I express an earnest hope that you will always regard us as your sincere friends, for, believe me, we are actuated by a single desire to promote your welfare and happiness. In return we ask, and I believe we shall not ask in vain, for your confidence and your co-operation. There must be none of the innate distrust with which a pupil too often regards his pedagogue, for we are here all students; and, though some of us have been pursuing the steep path of knowledge for more years than we care to remember, we all have the same goal in view; we are all striving to compass the same end—the relief of human suffering.

It seems hard that those gentlemen who appear amongst us for the first time should at once be lectured, for as yet they have done nothing to deserve such an infliction; and I feel somewhat in the same position as the stern parent who invariably gave his children a sound thrashing before breakfast, on the ground that they might possibly need it later on in the day when he would not be there to administer the correction. I cannot, however, too strongly impress upon you the wisdom of adopting a methodical mode of work. Doubtless "distance lends enchantment to the view," as far as the College examinations are concerned; but that student alone can regard their approach with confidence and equanimity who begins to work steadily and with method from the commencement of his career.

Anatomy and physiology should at first engage your almost exclusive attention, and your knowledge of these subjects must be sound and practical. Begin by studying the skeleton thoroughly, and be constantly in the dissecting-room. Here I would offer a word of advice which may perhaps surprise you; it is this: do not occupy too much time in making elaborate and ornamental dissections. It is, of course, essential that you should acquire manual dexterity and neatness, but I am convinced that the most reliable anatomists are those who relentlessly pursue each muscle and nerve, and investigate each hidden bony cavity, as opposed to others who hesitate to be thorough because they might spoil the appearance of their dissections.

I may, perhaps, shock the feelings of our officers of health by advising you to live as much as possible in an anatomical atmosphere; but I mean by this expression that you should so far allow anatomy and physiology to absorb your attention that they almost enter into the pores of your skin, and that they should form the chief subject of discussion with your fellow students, for whose delectation and instruction you should at all times be ready to produce some hidden treasure, such as the bones of the carpus or a special cervical vertebra. In the evening you should, by study, not only consolidate the practical knowledge which has been gained during the day, but anticipate the work which lies before you on the morrow, so that, scalpel in hand, you may know what to look for, and where the object of your search is to be found. To those happy beings who have successfully passed the dread ordeal of the first examination I would offer a few words of friendly warning—"Labuntur Anni." In less than

three years you must have put on such an armour of knowledge and experience as will enable you to face those terrible opponents—disease and death. Within the walls of hospitals you can witness the daily conflict, and even there, where the weapons of modern science and treatment are wielded by experienced hands, the foe too often gains the victory. But the time is coming when you must each of you, and alone, commence the struggle. The time is coming when the life of a fellow creature will, humanly speaking, be given into your hands, as

When that voice in feeble moans of sickness and of pain,
But mocks the anxious ear that strives to catch its sound in vain;

when the first-born is in danger, and the mother's eye is turned to you appealingly for help; when the life-blood is flowing fast from the wounded artery, and all depends on your knowledge, precision, and resource. What will be your feelings if at such times you are found wanting, because the bitter memory of your student's life shows nothing but a barren record of ill-spent time and wasted opportunities? I cannot, I will not believe that any of those whom I am now addressing will be found in the ranks of the ignorant and the unready. You would prove false to the standard of St. Mary's and its noble past, for as the soldier looks with pride upon the banner that bears the scroll of by-gone victories, so we in our turn cherish the names of Alderson, Sibson, White Cooper, Wiltshire, and Meadows, of men who, though their sun has set, still light our pathway with a lingering after-glow of golden memories.

I would once more impress on you the importance of dividing your time into regular intervals of work; but I should also be amongst the first to acknowledge that he will labour most successfully who is ready in due course to relax his mental strings, and promote his physical welfare by healthy and manly recreation.

My ideal of a model worker was realised in an old college friend at Cambridge who rowed in the first boat, was the best bowler in our eleven, and came out high enough, amongst the Wranglers, to obtain his Fellowship.

You must, I know, accomplish a considerable amount of reading, and become during the long winter evenings slaves of the lamp; but your favourite fields of study should be in the wards, and in the out-patient rooms. There and there alone can you gain a sound practical knowledge of medicine and surgery, and I may perhaps be pardoned for the suggestion that you might do worse than devote the scraps of your spare time to the special departments. Later on in your student's career, you will become dressers, clinical clerks, and finally, if you are found worthy of high office, house-surgeons.

In these several posts you will taste the sweets and bitters which pertain to personal responsibility, and I would venture to make a special appeal to you concerning your treatment of the patients who may be placed under your care.

There is a vague impression on the minds of many of the general public that constant familiarity with scenes of suffering begets a callous feeling in members of our profession. I cannot for a moment allow that such is the case, but I earnestly hope you will one and all remember that the accusation of needless cruelty is occasionally, though quite unjustifiably, hurled against us, both in poetry and prose, and it is by deeds, not by words, that we must refute the charge.

The divine injunction that we shall "do unto others as we would they should do unto us" can never be more perfectly carried out than in our treatment of our patients, while the helplessness, and too often hopelessness, of suffering and disease should stir the better feelings of our nature, and stifle harshness with their mute appeal.

We should endeavour to combine with a gentle bearing, calm judgment, and unflinching decision, where prompt action is necessary; there should be the iron gauntlet in the velvet glove. Special care is needed in our treatment of children. A child's confidence is easily won, and a few moments devoted to the accomplishment of that end will not be wasted. Nothing is more touching than a child's implicit faith in our efforts for its relief, or more complete than its gratitude for results achieved.

And now for a few words of counsel as to the best method of utilising the first few years after you have emerged from the condition of student to that of qualified practitioner.

There may of course be special reasons why some of you must plunge at once into the vortex of practical work, and it is a natural, and I may add a healthy, impulse which makes a young man desire to transfer the burden of expense and responsibility from other shoulders to his own; but I would earnestly advise such of you as have time and opportunity for additional study to pass some of the higher examinations, and, if possible, to acquire a university degree. Believe me, you should thus utilise those few invaluable years when

the seed of knowledge is received and germinates in a pure mental soil, and when youthful energy and confidence are as yet unchecked by the cares and responsibilities which must inevitably accompany advancing age. Use therefore this priceless time.

"It will not last for ever,
Still ebbing from our gaze;
The waves of life will never
Bring back those golden days."

I strongly advise you to apply for resident appointments either here at St. Mary's, where I am glad to say they are freely open to our students, or if there be not room for you at home—for with the best desire to do so we cannot provide in that direction for all our *alumni*—then you must seek "fresh fields and pastures new" at some of our excellent provincial hospitals, where you will find physicians and surgeons from whom you may acquire much valuable knowledge, for the country contains many men who are more than able to hold their own with their metropolitan brethren.

After spending some time in the manner I have indicated, the most serious work of your life will commence. You will now realise more fully that life is real, earnest, and laborious. You will feel that your frail bark has at length quitted its safe anchorage, and must sail on unknown seas, where there may be under-currents of jealousy, quicksands of professional rivalry, and sunken rocks of unforeseen disaster and discredit. In spite of prejudice and competition you must slowly but surely win your way into that hardly-won fortress, the confidence of the public. The struggle will be severe, but let the work be loyally done. Let there be nothing mean or underhand, no attempt to gain credit at the expense of another practitioner, no trafficking with cant or hypocrisy; better to accept an honourable failure than stoop to such miserable expedients, which can but result in complete mental and moral degradation.

Remember that material prosperity and wealth are only to be valued as they minister to refinement, to moral and intellectual progress, to the promotion of science, and to the furtherance of that broad and holy charity which elevates mankind. You must be ready to offer upon the altar of public duty that most precious and sacred of all virtues—self-sacrifice.

A far abler pen than mine, and one which I may be pardoned for regarding with filial veneration, has thus described the life that is before you:

"Picture to yourself for a brief moment the life of a medical man in the full tide of his professional career; what a stormy anxious unrest it is; what exorbitant exactions are made upon his resources; what exaggerated expectations are formed of his powers; what unthinking demands are made upon his vital energies. By day and by night, for rich and for poor, with or without recompense, he must obey the summons of suffering humanity. How many anxious, complicated, unfortunate cases he meets—cases where great confidence is placed, where great interests are at stake, where the feelings are strongly enlisted—cases where life may be just quivering in the balance, and one slight error of judgment may snap the slender thread; when every eye is turned in anxious trusting faith and eager hope upon him, and he must sustain their drooping hopes by a fictitious calmness, and assume a confidence that his judgment belies, until his over-taxed mind and over-wrought feelings are well-nigh exhausted with the effort.

"Again, he must be ever ready to encounter accidents, disease and death in all their most appalling forms; when friends are paralysed with fear, and when contagion carries panic to the stoutest hearts, he must be there calm and unmoved. The blanched mother may be fluttering out her own life at the moment when she has given birth to another, the victims of cholera may present all the hideous features of death whilst yet writhing in vital agony, delirium and tetanus may compress the energies of a life in a few brief, racking, fatal hours, and still he must be there to gaze on sufferings he cannot relieve, and to feel that science is impotent and humbled in the presence of indomitable death."

Such is the picture painted by one who was himself a member of our profession, and who knew the hardships and anxieties of our toilsome life.

Are there any now listening to me who hesitate to enter upon the thorny path that lies before them? I have been told that in the Latin Church each candidate for holy orders is required to pass many days in solemn prayer and solitude before presenting himself for ordination. When at length the fateful day has arrived, and they appear before God's altar, the Bishop, after pointing out the nature of the sacrifice which must be made in the complete surrender of personal will, of wealth, and of the many attractions of the world, makes a lengthy pause, during which any who may still doubt the depth and

sincerity of their convictions may, at the last moment, reconsider their position, and retire ere it be too late.

In like manner I would not have you enter lightly or unwarned upon the arduous duties and responsibilities which can never be dissociated from our career. Remember that, as in the case of the priest, the sacrifice must be complete and thorough, and that you must give the whole man for the whole time.

Although we feel a justifiable pride in our hospital, in our growing school, and in the number and character of the recruits who now flock around our banner, we would not willingly enlist one soldier of medicine who will not be true to his colours, or who will falter in the presence of the enemy, for we must present an unserried and unflinching phalanx, firmly united by the bonds of mutual confidence, and by the knowledge that those who fall will not have died in vain. But before you make your final decision let me turn to the brighter and more sunny side of the medical landscape.

"The old order changeth, yielding place to new," and the onward march of time has brought with it so many beneficial innovations in our method of work, and has made such large additions to our instruments of precision, that we go forth to the fray more fully equipped than were our forefathers; indeed, the advance in medicine and surgery has been proportionately rapid, as the importance of physiology and pathology came to be recognised, and the phenomenal growth of these two giants has been of comparatively recent date. The early history of our profession is surrounded by an atmosphere of mist and haze, which not infrequently accompanies the dawn alike of day and of scientific truth, and our brethren in the middle ages seem to have thought that a cloak of mysticism and necromancy would suffice to cover a multitude of medical sins. According to the chroniclers of the time, a visit to the doctor's cavernous sanctum must have demanded a mixture of courage and confidence to which many modern patients cannot lay claim. The dim light of a taper served to throw the contents of the chamber into unpleasant relief. A large stuffed lizard—apparently an indispensable companion—was suspended from the ceiling, while the walls were artistically decorated with toads, snakes, newts, and other slimy creatures; a large crucible occupied a prominent position, and the sulphurous odours which pervaded the room unpleasantly suggested the possibility of the doctor's having entered into an illicit partnership with the gentleman who lured Faustus to his ruin.

We are not told whether as much importance was at that time attached to the possession of a good professional manner as is now the case; but the doctor evidently relied not a little upon the impression which a flowing robe, liberally garnished with cabalistic signs, would create upon the mind of his patient, and he was always ready to call astrology to his aid if he found himself face to face with any unusually tough matter for diagnosis.

The remedies used in those days appear to have been extremely powerful, and, if history may be trusted, the drugs that obtained the highest popularity were strong and reliable poisons, which were by no means devoted by the purchasers to the salvation of human life. The treatment of wounds did not err on the negative side, for the immediate application of boiling oil was considered an infallible specific, until the practice received a salutary shock after one of the sanguinary battles. The stock of oil was unequal to the demand for it, and the unhappy surgeon, having no better substitute, treated a portion of his cases with cold water, and was much surprised to find that his new and involuntary remedy left the old one completely in the shade. Simplicity is not the least amongst the virtues.

A few more revolutions of the wheel of time bring us to the period of the barber-surgeons, the sign of whose calling showed that their fame for bleeding spread from pole to pole. Then in the sixteenth century came that pioneer of scientific research, the immortal Harvey, and we are proud in the knowledge that St. Mary's men are numbered amongst the most loyal and constant supporters of the society which bears his name. Time would fail me were I to mention all those who have left the stamp of their genius upon the seal of their time, but the memory of such men as Sydenham, Cheselden, Jenner, and John Hunter, makes us recognise with grateful admiration that "there were giants in those days." And now we come within measurable distance of our own time, and are able to draw our records from living men. Wonderful indeed are the stories we hear of the capacity for disposing of heavy meals and unlimited port, which English stomachs possessed at the commencement of this century, and equally wonderful were the heroic means adopted by our professional brethren to remedy the results of gastronomic indiscretion. Periodic bleeding and cupping, with the administration of strong purgatives, were deemed matter of necessity, and there was a constant supply of that which Ingoldsby has well described as

"That nasty green fluid they so often send us
Labelled *haustus cartharticus mane sumendus*."

It must have been as a mild protest against this system that a patient when asked by the medical man whether he had followed his prescription, replied, "Certainly not; if I had I should have broken my neck, for I threw it out of the window." It was a matter of certainty that there would be a reaction from such a system, and the recoil took us so far in the opposite direction that I am amongst those who think with our respected friend, Dr. Hare, that we sometimes fail to take advantage of old and valuable remedies because their indiscriminate employment has brought them into deserved discredit.

Now let me turn from the period where I must rely upon the memory of others, to that which comes within the circle of my own experience.

In how many directions the sappers and miners have been successfully striving to compass the overthrow of suffering and disease, and in regions which had previously been deemed impregnable! I have only to allude to the extraordinary advances made in abdominal surgery, and in the treatment of stone both in the kidney and bladder, and to the brilliant results of ovariectomy with which the honoured name of Sir Spencer Wells must ever be associated, to prove the truth of my assertion. Then again, even the opponents of Sir Joseph Lister must allow that the introduction of his system has taught us the incalculable advantages which accrue from extreme care, cleanliness, and attention to sanitary laws. The progress in medicine may not have altogether kept pace with the recent rapid strides made in the field of surgery, but the advance has nevertheless been sure and steady, especially in our knowledge of the pathology and treatment of diseases of the nervous system, while the comparatively new discoveries in bacteriology open out an almost illimitable area for researches, and may, I trust, lead to the downfall of many of those terrible diseases which have hitherto baffled their pursuers.

We are proud to know that British physicians and surgeons can claim a sufficient share in the advance of science, but we must readily and gratefully acknowledge the heroic self-sacrificing and successful labours of our professional brethren both on the Continent and in America.

And now, before I conclude, I trust that my friendly audience will pardon me if I stray for a few moments into those Elysian ophthalmic fields where I have passed my happiest days, and which, though small in area by comparison with the vast tracts of surgery and medicine, possess a soil that yields some of the sweetest flowers of human gratitude.

I am old enough to remember the introduction of the ophthalmoscope by that great teacher and thinker Helmholtz, who, I rejoice to say, yet lives to witness the priceless boon which his discovery has conferred upon the human race. It is difficult for those who are now familiar with its use—and their name I trust is legion—to conceive the wondering eagerness with which the original workers sought, by the aid of their new weapon, to bring to light those numerous hidden diseases of the eye which had till then been only partially and most imperfectly recognised. Many modifications of the instrument have since been introduced, and amongst the most recent and most useful improvements has been the ingenious adaptation of the electric light to the ophthalmoscope by my colleague, Mr. Juler.

Then, again, I remember the introduction of the sub-conjunctival operation for strabismus with hook and scissors, and the present method of enucleation of the globe, and with each of these operations the name of my honoured father must be associated. In the latter case the improvement on the previous rough and almost brutal method was so marked that the new plan was freely practised, and as there was a rather large stock in hand of eyes which needed removal, our witty friend and colleague, Monsieur Warlomont, of Brussels, had, perhaps, at that time some slight justification for his suggestion that unless an oculist had enucleated at least one eye during the day he could not sleep well at night. About this period the venerated Nestor of English ophthalmic surgery, Sir William Bowman, inaugurated a new mode of dealing with epiphora and obstruction of the lachrymal duct, by slitting the canaliculus and passing probes of various sizes; and he has been followed by Weber, Stilling, and other intelligent workers, who have grafted many ingenious additions to the parent stem. In 1856 came the remarkable discovery by our beloved von Graefe, that the dread disease glaucoma, which had till then defied all the efforts of the ophthalmic surgeons, might be successfully subdued in the greater number of cases by that safe and simple operation, iridectomy. He met the usual fate of great inventors, and encountered in many directions an opposition which was doubtless honest, but by no means unprejudiced, and I cannot but remember with pride that he received most loyal, and, as he gratefully owned, most valuable

support from Sir William Bowman and my father, and from the large majority of English ophthalmic surgeons.

The fact that iridectomy was too readily assumed to be a universal remedy, and that the iris seemed to act upon the minds of some oculists in the same manner that a red rag does upon a bull, by no means detracts from the merit of von Graefe's brilliant discovery. It has stood the severe test of the experience of thirty years, during which time it has been exposed to the searching rays of professional opinion, and its merits and demerits have been repeatedly and exhaustively canvassed; and although its efficiency in certain forms of chronic glaucoma is doubted by some, all must now admit that it is of inestimable value in the acute and subacute conditions of the disease.

To von Graefe also belongs the credit of having introduced an operation for extraction of cataract, which, with certain slight modifications, remains to this hour the most successful and the most generally adopted method.

To our countryman, Mr. Jonathan Hutchinson, we are indebted for the discovery that certain forms of eye disease may be directly traced to hereditary causes.

We must not forget that amongst the numerous improvements in our art which have come from our distinguished *confrère*, Dr. De Wecker, of Paris, we have sclerotomy, the handmaid of iridectomy, being sometimes used as its efficient substitute, and sometimes as its successful supplement.

From him also comes the treatment by jequirity in cases of pannus, and the application of the tattoo to dense and disfiguring leucomata. I can but glance briefly at the great progress made in the introduction of peritomy, of inoculation, of improved plastic operations on the eyelids, of evisceration, and of the methods of dealing with conical cornea; but I must not omit to make grateful allusion to that valuable local anæsthetic, cocaine, which, though a boon to all humanity, renders such exceptional service to the ophthalmic surgeon.

At the risk of taxing your patience unduly by dwelling too long upon this special subject, I must remind you of the colossal work achieved by the illustrious Professor Donders, who has opened out a new world for thought and investigation, and has elevated the study of practical optics to the dignity of a science. He has taught us that strabismus, headache, some forms of diplopia, ciliary spasm, and many other evils, frequently depend upon some uncorrected error of refraction, and by placing it in our power to give the required relief, he has proved himself one of the greatest benefactors to humanity which the century has known.

You will acknowledge that the record of the last forty years is one upon which the ophthalmic surgeon can look back with mingled feelings of pride and thankfulness; but much remains yet to be done, and I trust that the time is not far distant when the spread of knowledge amongst us will alter those terrible statistics of sight lost in infancy through ignorant or wilful neglect of necessary care and treatment, and will also arouse the instructors of our children to a sense of their duties, and induce them to make that essential provision of light which is now too frequently absent.

You will, I am sure, desire that I should express the great regret which we all feel in losing the valued services of Sir Edward Sieveking, who joined St. Mary's Hospital when it began its struggle for existence, and has remained to see the fertile fruition of his labours.

I must also, on your behalf and on my own, allude with grateful pride to the good work which has been accomplished, both for hospital and school, by our Dean, Mr. Field.

For the rest, gentlemen, I would entreat you to be ever mindful of the dignity of your calling. Regard not that calling from a commercial point of view, but rather from the high stand-point of philanthropic science. In manly emulation you may well engage, it is the soul of scientific as of all other enterprise; but, oh, beware those jealous feuds and petty rivalries which degrade a glorious contest to the level of a mean and merely personal competition. Let no sordid, selfish aims ever tempt you into courses derogatory to the true motive and purpose of your pursuits—the alleviation of human suffering. Never forget the saying of a famous surgeon, "Ours is the noblest of professions, but the vilest of trades."

A due sense of the honour of your art will make you nicely observant of your own. Nor will you fail to remember that, even in the case of the most gifted student, industry is the indispensable handmaid of success. The mental, as the material soil, needs for the yielding of an abundant harvest careful culture, only to be achieved by thorough hard work and anxious observation. "Pater ipse colendi haud facilem esse viam voluit."

It is given to few members of our profession to achieve undying

fame. The artist leaves the record of his genius on the painted canvas, and wondering ages worship at his shrine; the poet lives again in words of song that hang upon the lips of countless generations; and the musician breathes his soul into the enchanting melodies that echo for all time. Such fame is not for you. Yours is the priceless luxury of doing good, and in the gratitude of those whose pains you mitigate, whose sorrows you assuage, there lies a richer and a nobler recompense than "prondest record 'mid the tombs of kings." Be, therefore, of good heart. Rest assured that the reward which waits on diligence will in the fulness of time fall to your lot. As Hamlet says, "If it be not now yet it will come, the readiness is all."

ENTERIC FEVER AS SEEN IN INDIA AND IN OTHER TROPICAL AND SUB-TROPICAL COUNTRIES.

By JAMES MACARTNEY, M.D.,
Surgeon-Major, Medical Staff.

SINCE the comparatively recent general recognition of enteric fever in India, and in other countries where malaria is prevalent, a constant disposition has been evinced on the part of individual observers to describe it as something different from that fever as it occurs in Europe. There are some who go the length of naming it typho-malarial fever, and others again who, even when ulceration of Peyer's patches is found on *post-mortem* examination, still believe, from the peculiar course of the fever, that the disease is of the climatic remittent type.

Having seen enteric fever myself in climates so dissimilar as those of England, South Africa, Mauritius, and India, both in the hills and plains, I have gradually come to believe that a difference does exist, though probably one of degree only, between the home and the foreign variety; between enteric fever as seen in cool, temperate, and non-malarious countries, and that of hot, moist, malarious regions. Moreover, these differences appear to me to manifest themselves *pari passu*, as we pass from temperate zones towards the tropics.

Is it possible that these very peculiarities of enteric fever have themselves been the cause of the true nature of the disease having remained unrecognised in India for so long after it had been fully differentiated from other forms of fever in Europe?

Budd's opinion, accepted by so many, that enteric fever must be propagated from the dejecta of persons affected with the disease, has led those who hold such doctrine to look for other causes for the fevers they meet with, knowing the improbability of such infection, and to regard them as climatic remittent fever. While it must be admitted that in many instances in England outbreaks of enteric fever have been traced to specific infection from individuals primarily affected, in India such can hardly be the case, unless, indeed, it were admitted that infection came from a masked and unrecognised type of the disease existing amongst the native population, and classed as remittent fever.

1. As showing its widespread existence in India, independent of epidemic influence, Sir Anthony Home pointed out, in his inspection report for 1883, that no station hospital for British troops was without a case when he visited, and it is the experience of most Indian observers that cases of enteric fever continue to crop up, one after another, with longer or shorter intervals between them, but without the least apparent individual connection. This would negative the specific infection theory in India, and suggests some peculiarity of etiology.

Taking it for granted then that there are certain peculiarities attaching to the disease as seen in India, and in other tropical and subtropical countries, notwithstanding the opinion of some authorities to the contrary, the pointing out and establishing, if possible, of these differences, might lead to a better understanding of the whole subject of the continued, pseudo-continued, and remittent fevers of hot countries. Having mentioned the first peculiarity of the disease—namely, its tendency to occur in a widespread manner, but without connection between individual cases as in Europe, I will pass on to the next.

2. This is its tendency to occur in many gradations of intensity. Thus, while in England a medical man is able to pronounce with tolerable certainty that his patient is "in for typhoid," experience teaches us in India to be more guarded, for although to have the courage of our opinions is a good thing, it will not improve our reputation with our patients to declare at the outset a case to be "typhoid" which may recover within a week.

And we may here discuss the point—Are these transient febrile complaints, lasting a week or ten days, which are so common in India,