dangers which must be watched with a jealous eye and guarded against with a firm hand. By the *prestige* of precision, often unmerited, which they carry with them, experiments sometimes cover the most flagrant errors and give currency to false or inadequate generalisations. Even when every precaution has been taken to secure precision and accuracy in every particular, it cannot safely be inferred that the results of certain experiments upon animals will be identical with those which would happen in man submitted to like conditions. Nor, without other authority, would it be justifiable to use those results in the explanation of physiological, pathological, or therapeutical facts; for, however numerous may be the results of experiment, however important may seem to be their bearing upon the progress of science, they will be of no avail to medicine, and it will not be safe to use them in her service, until they have been filtered through the checks and counterchecks of clinical experience, and have responded to the tests and counter-tests of clinical trial.

Now, experiments cannot be performed upon animals without the infliction of suffering; and we, whose lives are spent in aiming at its relief, ought not to be indifferent to this inevitable and painful fact, nor regardless of the solemn responsibility which its existence imposes upon us. I rejoice to believe that we need not reproach ourselves for this sin; and that, as a body, we have never transgressed the limits set to our inquiries by the order of nature, the exigencies of human suffering, and the sanctions of wise and good men.

Three years ago, a certain section of the public thought otherwise; and, by dint of clamorous outcries against our humanity and the circulation of accusations of cruelty either exaggerated or false, forced the Government into a hasty legislation, which, whilst it permitted the show, sacrificed much of the substance, of freedom in this matter. Since then, although crippled in every limb, inquiry has managed to limp along and to do some useful work. No experimental atrocities have been heard of, and no occasion has arisen to make men and women forget their loyalty to charity, to justice, and to truth. In these circumstances, whilst conforming in good faith to the conditions imposed upon us, we might justly have expected to be left to travel unmolested along our narrow and difficult way. But it is quite otherwise, and I have learned upon undoubted authority that means are being rapidly collected for a fresh crusade, that no quarter is to be given in the coming conflict, and that no peace will be concluded until the liberty of inquiry by experiments upon animals is unconditionally extinguished.

It is hard to understand the reasons of this passionate antagonism, and still harder to believe that it has no other foundation than the desire to protect the lower animals from unnecessary suffering. For, if this be true, why do our antagonists confine their warfare within such narrow limits? The infliction of suffering for ulterior ends everywhere manifest in nature, now adjusting the balance of nations or establishing the anatomies of peoples, pervades the whole structure and relations of civilised life. What is all the suffering inflicted by all the vivisectionists of all the world, in comparison with those hecatombs of suffering which political experimenters have inflicted upon mankind in their vain attempts to settle the question of the balance of power in Europe? Are the sufferings of men of less account than the sufferings of brutes? Is their blood less precious? Are the countless woes of countless human hearts to be reckoned but as dust in the balance against the wounds of guinea-pigs and frogs? Surely the love of knowledge is as pure and true a human desire as the love of sport; and, whilst the fruits of this die with the individual and his interests, the fruits of that live for ever in growing uses to the race.

If it be true, then, that we are again in peril of a fresh attack, and that the one object of it is to be the unconditional extinction of experiment upon animals, I trust that we shall not stand idly and timidly by whilst this great evil is being done. I trust that every member of our great profession, and every thoughtful man beyond its pale, will unite to make this cause their own, and will offer to threatenings of fresh legislation such an implacable opposition that the statute-book of England shall never again be sullied by penal enactments against the just liberties of knowledge. The highest heritage of humanity is in our keeping; all the past and all the future conspire to make us loyal to this sacred charge; and, at whatsoever cost, of whatsoever kind, we must hand down the right and the freedom of inquiry unmortgaged to future generations.

And now, having occupied rather more than the sacred quarter of an hour, I shall no longer interpose between you and the important discussions which are before us. I shall content myself with expressing the hope that, each effacing himself and uniting together for the higher objects of this Association, our deliberations and discussions may issue in some advancement of knowledge and its still wider application to the uses of men.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF SURGERY,

*At the Annual Meeting of the British Medical Association,
in Cork, August 1879.*

By WILLIAM KEARNS TANNER, M.D.,
Professor of Surgery, Queen's College, Cork; President of the Section.

A RETROSPECT—SURGERY IN CORK.

ON taking the chair in this Section, I cannot but express myself deeply sensible of the great honour and pleasure bestowed upon me, an honour of which I feel myself unworthy when I behold around me men, not merely of local, of British, of European, but of world-wide fame; men whose brilliant attainments in the noblest field of philanthropy, in the alleviation of pain and suffering, which are the allotted portion of mankind, have cast a brilliant halo on this British Medical Association. Any one of such men could preside among you far better than my unworthy self; but since I am informed that it is one of your customs to place a local man in this post of honour, I assume it, feeling uncommonly like a Lilliputian who is suddenly placed upon a Brobdingnagian pedestal, and rendered, by reason of his advancement, only still more conscious of his own diminutiveness, or perhaps like a glowworm exposed to the penetrating rays of many suns. However, gentlemen, the great pleasure which succeeds this honour, the pleasure of seeing, of hearing, and of bidding you a right hearty "*Cead mille failha*" to this southern capital of our Emerald Isle, is indeed a pleasure dear above all others to an Irish heart. During my lifetime, it has happened that many associations have assembled in this my native city for the furtherance of objects political, social, and scientific; for we Irishmen, and in particular we the southern inhabitants of Erin, glory and delight in assemblies, whether they be for Fenianism, Home Rule, for purposes of scientific investigation, or even for the promulgation or abolition of temperance; but a gathering such as this has never been witnessed in this locality: an association, a together-coming of *socii*, of friends and brothers, truth-searchers and comrades, armed with patience, courage, and perseverance, illumined by knowledge and science, directed and assisted by our Divine Captain, The Great Physician, assembled *pro bono publico* (taking this term in its widest acceptance) to conquer, and beat back still further, disease, the dread foe of the human race. Yes; this day is indeed one which should be marked with a white stone in the annals of Cork city.

That special subject which falls to the lot of this Section is *the one* with which I have been identified for the past forty-two years in this town. During this long period, I have regarded, with mingled feelings of wonder and pleasure, the giant strides which surgical art has made in our native land, as well as in foreign countries. This progress I consider mainly due to two causes: first, to a more scientific insight into the etiology of surgical affections, from the increased and ever increasing study of physiology, histology, and pathology; and, secondly, to the augmented intercourse among members of our profession, which brings about our pleasant and beneficial meeting of to-day. This has been, of course, effected principally by the great improvements in travelling of modern days; an improvement of which our local railway and steamer companies will be most happy to give a good practical exemplification to such of you as choose to take part in the excursions which have been organised for the recreation of members of this Association. I find I must add to this a third cause: the increased number and spread of medical journals, magazines, and periodicals, by which means are easily afforded of chronicling the smaller additions to the sheaves of medical knowledge, waifs and strays which might otherwise be lost. Again, on referring to the earlier pages of my life's history, I perceive that France was the main educational surgical body of Europe; for although Great Britain possessed many illustrious men, such as the Coopers, Brodie, Syme, Home, Crampton, and Colles; yet these men were to an extent isolated in their endeavours, and, if I may be permitted to call them so, were pioneers heralding the general advance of the present day; an advance along the whole line I may term it. This great multiplication of eminent men has, moreover, produced in our country not merely this advancement, but also an equalisation among the members in the ranks, an equalisation which did not exist so generally in former days in our profession, and, which I take leave to remark, results not only from the improved education, but chiefly from the increased intercourse, the friction which brightens and polishes the intellect, casting more luminous rays into the dark country of unexplored medical science. Again, gentlemen, on comparing the past and present,

albeit our own land has been one of the most prominent, if not the most prominent, in the onward march, she is not alone, France, Germany, and America accompany us, and rival us in a glorious contest for the universal benefit. France, although greatly altered from the severe losses which she has within the last twelve years sustained in such men as Jobert, Civiale, Velpeau, and Nélaton, has still found others who have stepped into their leaders' places, and aid in advancing the standard. Germany, the home of massive thought, is producing legions in every branch of our art, more especially in the realms of histological and pathological science; Berlin, Vienna, Leipzig, Bonn, Breslau, Heidelberg, and the annexed Strasburg, stand out most prominently to-day among the Teutonic Universities, as having still further improved our imperfect art of healing, by the extra power afforded from the increased attention to these sciences; and the cause of this will be found in the names of Virchow, Stricker, Pfleger, Cohnheim, Ludwig, Wagner, and von Recklinghausen, men who by their great attainments and indefatigable research show us the way in these subjects; while in our own special and more strictly practical demesne, we have—and long may he, I trust, continue to lead the van—my friend von Langenbeck, the ever-young veteran leader of the Vaterland's surgical science; while with him are Volkmann, Busche, Billroth, Nussbaum, Lucke, Esmarch, Thiersch, and Bardeleben, whose names speak for themselves. Again, our next-door neighbour, America, with the same energy which stamps our cousin's character, has gone on in the advance. For example, in the present day, there are no more valuable text-books in the hands of our students in every branch of medical literature than those emanating from Columbia, and to such men as Gross, Wood, Sayre, the Flints, Meigs, and Thomas, and many such like, is our western neighbour indebted for occupying that foremost position in our medical world, which by many an older nation is ardently coveted. I beg leave to term her a near relation; because if she be the first cousin of sister England, shall not emigration and the hosts of Irish in America tend to draw still closer the bonds of amity and relationship between Erin and Columbia; and I feel both proud and happy at being able to welcome some eminent transatlantic members of the profession this day to our assembly.

Gentlemen, I think it right to inform you that when I was offered and accepted the chair in this Section, I was completely unaware that it was expected of me to prepare and read an address, because I then understood that Mr. Savory was to read the address in surgery; accordingly I rested tranquilly on my oars until a very short time ago, when I was told that there were two addresses in each section, and that one was given by the President of each. This intelligence came on me suddenly; and, being at that time in very indifferent health, I did not know to what topic I should incline. I thought to investigate the subject of medical education; but of that we are satiated of late—it would partake too much of the character of a solo on the big drum, there being a kind of pleasing monotony about it; moreover, it is a subject to debate, not to dogmatise upon.

Therefore I considered it might perhaps be better and more edifying if I employed the time in giving you a brief account of any medical men of literary interest who have dwelt in, or who date from, this good city or county of Cork; saying a few words *en passant* about our medical schools, and winding up with a few remarks in connection with the immediate subject of our Section.

Although Cork has been the mother of many illustrious men in the various departments of literature and the fine arts, I regret to say that of medical writers she is rather deficient; but there are many reasons which account perfectly for this. The first cause is to be found in the natural strength of the Hibernian constitution; a second, in the limited but healthy dietary of our labouring population; and much as our national vegetable may be despised, this at least can be said in its favour: that it forms the staple food of the peasantry of two nations, viz., the inhabitants of Saxony, known in Germany as the *kartoffle Sachsen*, and the people of this island, both nations remarkable in no small degree for the health of their sons and their procreative powers. A third cause is yet again to be found in our mild and equable climate, which at present, I regret to say, is suffering under some aberration from its wonted track. This I have lately heard curiously accounted for thus: that our American weather-prophets had kept all the good weather for themselves, and sent us over the bad. At any rate, gentlemen, I consider that from these three causes a reason may be deduced for any local deficiency in the paths of medical literature.

The first medical work written in this district was, I find, the production of a non-medical man, the Rev. Denis Keogh, who wrote a book on *Herbs*, treating in particular the therapeutical and medicinal uses of the same. He was chaplain to the Lord Kinsale, and lived in the earlier part of the sixteenth century.

The next medical author on my list is Edward Barry, M.D., F.R.S., His Majesty's Physician-General to the Army in Ireland. He studied

physic at Leyden, and published a work on *Consumption of the Lungs* in 1728, besides many other medical tracts.

Dr. Joseph Rogers also published an essay on *Epidemic Diseases* in 1734, paying special attention to the epidemic fever which raged in 1737, and endeavouring to account for the same. As an appendix to this book will be found a very curious treatise entitled *Medicina Statica Hibernica*, or Statical Experiments to examine and discover the Insensible Perspiration of the Human Body, 1734, by G. R. These initials stand for the author, George Rye, an ancestor of the present Ryeourt family in this county. I should like to mention here a very curious circumstance which took place in the year 1740. The clergy of the diocese of Cloyne were summoned to a meeting in order to discourage witchcraft and prevent the people having resort to so-called supernatural influences; for the peasantry were in the habit of giving infants born with any abnormality to drink of *lushmoore*, which was a decoction of the *digitalis purpurea*, or "fairy fingers". This drink was supposed to be a specific for the expulsion of fairies; and so many children were poisoned, that at the request of some of the medical faculty of the district, the clergy were called to aid in expunging this singular and pernicious custom from our country.

Dr. Maurice O'Connell, born near Mallow, published a work containing observations and inferences on the air and diseases of the city of Cork. I find, in the year 1820, a very interesting communication, furnished by Dr. Pickles of Cork, concerning a girl who, having eaten some earth off a saint's grave in the south of this county, vomited several times in the presence of indisputable witnesses beetles and flying insects.

Next, turning our attention from mere individuals, I find that the first school of medicine in Cork had its origin from the zeal and exertions of one man—the late Dr. Woodroffe, justly honoured and esteemed for his erudition as an anatomist and physician, and his skill, judgment, and tact as a surgeon. This school was started in the year 1814, and was from the first a success, albeit the strong prejudices of the non-medical community might have proved detrimental were it not that we, being placed as a centre for the South of Ireland, and possessing even as we did at that time two general hospitals—the North and South Infirmaries—numbers of cases flowed in from all sides; hence a great opportunity was afforded for clinical investigation, and all that lacked was theoretical and anatomical instruction, which deficiency Woodroffe supplied, and many pupils, who afterwards rose to great eminence, received their primary medical education at this school: amongst the number Dr. Butcher of Dublin; moreover, Macleise the artist and Hogan the sculptor both took out the anatomy classes, and it is related that the former used frequently to get nauseated and sick during lecture, but his moral courage enabled him to triumph over his bodily or rather gastric infirmity, for he concluded the course, and acknowledged long afterwards the benefit he had there received. This school, in which I had the honour to be a demonstrator, was continued, after Dr. Woodroffe had retired into private life in 1841, by Dr. Cæsar, until some time after the foundation of this Queen's College, and had many pupils attending its medical curriculum; but the death of Dr. Cæsar—"aut Cæsar aut nullus"—proved the termination of the school's existence.

Now, about the present school of medicine in this college, I have only to say that its rapid progress has been accelerated to a great extent by the untiring efforts of Dr. Sullivan, our indefatigable President. For the work it has accomplished, we point with pride to our daily increasing list of eminent medical graduates.

Turning now to our local surgical practice, I was hoping to lay before you a short statistical *résumé* of the surgical affections most common in this part of Ireland, and my experience in their management; but I found, on entering upon the subject, immense obstacles in my path, both from the difficulty of finding proper details, which impediment I might have overcome had I the time afforded me to communicate more fully concerning them, and also from the impossibility of finding anything worthy of your special attention. Most of the various classes of interesting surgical affections, common enough in other parts of this realm, are rarely met with here; for instance, stone, a subject to which I have always devoted much attention. I find, on investigation, that I have cut for, or crushed, thirty-two cases in my lifetime, and was fortunate enough not to lose a patient. This list, which constitutes the major number of cases treated in this city for thirty years, is extremely small in proportion to our population, and is insignificant, considered in connection with such prolific stone-districts as Norwich or Glasgow, or with Sir Henry Thompson's magnificent collection of three thousand successful cases. Again, hernia, which is so common in England, is, comparatively speaking, rare here. It is an affection for the relief of which, when strangulated, I in my earlier days was ordinarily wont to operate; but for these last twenty years I have always been able, by a careful application of a modification of the taxis, successfully to reduce

every strangulated hernia without resorting to the knife and without untoward results.

Aneurism is decidedly diminishing in this country, and operations for its cure (which used to be frequent) have become as rare as fine weather this past summer. This lessening I ascribe chiefly to a diminution of the abuse of mercury in the treatment of specific disease.

Concerning antiseptic surgery (to which I have given a fair trial, with the best possible results), I have come to the conclusion that the more recent be the wound the better its prospect, if treated antiseptically, and if the method of procedure according to Lister be carried out in its integrity. Although I have heard this treatment receiving severe handling from many eminent surgeons both at home and abroad, yet my firm and unaltered belief is that it has only to be thoroughly undertaken to be believed in; and what I say of the management of wounds in general I believe to apply more decidedly to all injuries of joints, whether they be the result of an operation or accident. I am not disposed to enter at present into a laudation or defence of antiseptic surgery; but I merely state what I find by experiment to be the fact, and, from a retrospect both of hospital and private cases, that it ameliorates and diminishes the discharge from a wound, promoting thereby its more speedy union, and is an effectual preventative to any fever resulting in the absorption of septic substances. I must say, in addition, that, where it is impossible to apply this system in its entirety, I have experienced the most happy results from the use of tow-dressing, advocated by Bardeleben of Berlin.

Respecting bloodless surgery (the invention of Esmarch), I am sorry not to be able to add my quota in its favour as a general line of treatment; for, although it conduces enormously to the immediate success of the operation, yet still I regret to say that the after-results are not so happy. Whether it be from the production of plethora, or from the forcing of septic particles into the circulation, or whether the pressure on the vessels produces afterwards a corresponding paralysis in them and tends to a congested state of the wound, I will not here pause to debate; but I find this treatment chiefly advisable in anæmic cases.

Bearing the fact in mind, gentlemen, that you are to receive an address from Mr. Savory, which will be infinitely more interesting than any remarks which I could have it in my power to make, since, with his genius and research, he treats of the progress of surgery, whilst I am merely dealing with a faint retrospect, and being moreover cognisant that the time allotted to this Section for the reading of the several papers is so limited that it is quite possible all of them cannot be gone through, I shall refrain from inflicting any more remarks of mine upon you, and will take this chair, thankful that it has been my happy lot to have it in my power (drawing near the close of a long and I hope a not altogether useless career) to welcome so many of my professional brethren as I at present see around me to this *statio bene fida carinis*; and I can only hope and trust that the contributions to the advancement of surgical science which are to be received in this Section, and the general success of the meeting, will give each one present, in the words of Prout, an additional

"Cause to ponder,
Where'er they wander,
And still grow fonder,
Sweet Cork, of thee—
With thy bells of Shandon,
Which sound so grand on
The pleasant waters of
The River Lee."

MURIATE OF PILOCARPINE IN ECLAMPSIA.—Dr. Braun relates, in the *Berlin. Klin. Wochenschrift* for June 16th, a case of puerperal convulsions successfully treated by subcutaneous injections of pilocarpine. The patient was a robust, healthy, young woman, who had been recently delivered of her first child. About an hour after the child's birth, violent convulsions set in and were frequently repeated. When seen by the author, five hours after delivery, she presented all the symptoms of a severe attack of eclampsia. The convulsions followed each other rapidly, and during the intervals the patient was insensible. The bladder was empty; no urine had been passed since her delivery. Large doses of chloral-hydrate were prescribed, and a subcutaneous injection of two centigrammes of morphia made; but without effect. During the next twenty-four hours, the patient's state assumed almost a hopeless aspect; when it occurred to Dr. Braun that, as the eclampsia of puerperal women is caused by uræmic intoxication, a diaphoretic drug would diminish the tension in the arterial system and free the blood of toxic matter. He accordingly made a hypodermic injection of three centigrammes of muriate of pilocarpine. This was followed by very profuse perspiration and salivation. During the next half-hour, the muscles of the eye and the face twitched a few times. No more eclamptic fits came on, and the patient recovered quickly.

FORTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in CORK, August 5th, 6th, 7th, and 8th, 1879.

FIRST GENERAL MEETING, TUESDAY, AUGUST 5TH.

THE chair was taken at 3 P.M. by Dr. FALCONER, the retiring President. The minutes of the meetings at Bath were read and confirmed.

Address of the Retiring President.—Dr. FALCONER, as retiring President, asked the Association to accord him a few minutes while he narrated some of the occurrences and work of the Association during his year of presidency. Probably some of these would be stated in the annual report; but they were still worthy of being mentioned by him. When the Association paid its first visit to Ireland—in the ever memorable visit to Dublin in 1867—[cheers]—it was under the presidency of the late Dr. William Stokes, whose remarkable ability, geniality, and hospitality made the gathering a marked success. The year following, the Association went to Oxford, when Dr. Stokes vacated the chair to the Regius Professor of Physic in Oxford University, remarking with pride that, since the visit to Dublin, the number of the Association had increased to three thousand. Now, however, on this second visit to Ireland, it was his (Dr. Falconer's) pride to say that the Association had more than doubled its numbers since the presidency of Dr. Stokes, for it had now 7,810 members; and, moreover, four Branches of the Association had been established in Ireland since the meeting in Dublin, and they formed a great addition to the strength of the Association. [Cheers.] The present meeting, so well begun in Cork, was an augury of still greater success, and of still larger additions to the strength of the Association. Among the points upon which he desired to touch was the work of the Scientific Grants Committee; and the members would be rejoiced to learn that, added to the fruits already gathered, was the publication of Dr. Roy's paper on Epizootic Pleuropneumonia, as well as the promised presentation at this meeting of a report upon the interesting subject of hydrophobia by Mr. Callender, and drawn up by him and Dr. Burdon Sanderson. [Cheers.] Again, by the assistance of Dr. Cameron, M.P., the measure which the Association had long supported for the restraint of habitual drunkards had passed into law under the title of the Habitual Drunkards' Act; and it was not to be forgotten that, in the work done by the Habitual Drunkards' Committee, Dr. Alfred Carpenter, the President of Council, had been a "leading hand". [Cheers.] Then there had been the question of hospital out-patient reform dealt with; and when he stated that Mr. Timothy Holmes would present the report, he had said sufficient to convince the members that the subject had been dealt with energetically and with the greatest judgment. [Cheers.] The matter of medical reform he would not deal with now, as the question was not in a position to be discussed; but the members knew that there had been a Committee sitting upon it, under the presidency of a member who for years had spared no labours—who had scarcely, indeed, spared his health—in the endeavours to obtain the recognition by Parliament of the principles which the Association had early adopted; and he had great pleasure in mentioning the name of Dr. Waters of Chester, who had shown this self-sacrificing spirit on behalf of the profession of which he was so bright an ornament. [Cheers.] It was with pleasure, too, that Dr. Falconer stated, among the events of his year of office, that the Council of the Association had awarded to Surgeon-Major Reynolds, V.C., the Gold Medal of the Association for "distinguished merit"; and Dr. Reynolds would have his name added to that long list of heroes whose native soil was on that green island called by the eloquent poet Moore,

"The emerald gem of the Western World." [Cheers.]

In conclusion, Dr. Falconer commended his successor to the notice of the members, and described Dr. O'Connor as the representative of the highest standard of professional integrity and probity, and as one who had throughout his life maintained the honour of his profession. Besides his high character as a gentleman, he was the senior medical officer and Professor of Medicine in Queen's College; and no one was held in higher esteem among his professional brethren than was Dr. O'Connor. [Cheers.] Dr. Falconer was certain that the incoming President would discharge the onerous duties of his office with honour to himself and advantage to the Association; and Dr. Falconer trusted that the prosperity which had hitherto marked the Association would continue year by year. [Cheers.]

Amid renewed cheers, the new President was inducted into the presidential seat.