

William McGee (1792/3–1874)

President of the Belfast Medical Society	1853–54
President of the Belfast Clinical and Pathological Society	1856–57
President of the Ulster Medical Protective Association	1859–61

Presidential Opening Address

Belfast Clinical and Pathological Society
25th October 1856

GENTLEMEN, – In taking this Chair, hitherto so ably filled, I have to tender you my sincere thanks for the honour you have conferred on me, by my election to the office of President of the Belfast Clinical and Pathological Society.

Some of you have already passed many years in practice, and have deservedly attained to eminence; – others are but commencing that course in which you can reach the goal of success only after many a rude cross and jostle; and, as I myself have had some hard experience, it may not be altogether out of place if I address, especially to our younger brethren, some observations on the medical practitioner and his mission, in relation to his duty to his patient, to his brethren, to society, and to himself.

In other professions, men may draw a boundary or separation line between their professional and personal character; but the duties of the medical man are too closely identified with the man himself to permit, with impunity, excepting in rare instances, any wide departure from the strict, though conventional, rules of society as to manner, deportment, dress, &c., &c. – rules which your own common sense will soon teach you.

Between the patient and his medical attendant there should be the strictest confidence: see that on your part it suffer no breach. You will, at times, be entrusted with secrets by your patient, on which may depend his standing in society, perhaps his worldly prosperity; you should, therefore, preserve all he may tell you as a sacred trust not to be abused.

In giving evidence in courts of law, you may, however, be compelled to disclose secrets entrusted to you in professional confidence: the privilege of professional secrecy is extended only to the case of facts stated to a legal practitioner to enable him to conduct his client's case, and perhaps also to secrets revealed to clergymen in their official capacity. If then the Bench give an express order that you shall answer, you have but to obey, and such a mandate will fully exonerate you from all blame for your revelations.

Once more, I say, be studiously secret; of old, loquacity has been reckoned as one of a physician's

faults that should be punished by law, and in the present day, the tattler is feared and shunned because of his talking.

On visiting your patient, always bear in mind that you have claims upon you, far beyond the consideration of self; that you are called on to give relief to the suffering; that on you depends, perhaps, the safety of the patient; therefore, in the sick room, give your undivided attention to the patient; let it be evident that he is your chief, indeed your sole object of consideration. Be careful that no appearance of haste mark your proceedings, no matter how much you may be pressed for time. Be attentive, be patient, and, above all, be gentle; for though some have made their fortune by rudeness and roughness, those rare exceptions are not models to be copied. I do not say to you be temperate: sobriety is a virtue, the value of which is so well known to you, that I need not urge it on you.

Despise not small details, nothing is trifling or unimportant that can hasten recovery or alleviate suffering; therefore be not laughed out of using every means that can aid you in forming a correct diagnosis. Situated as you will often be, with symptoms entirely, or as far as may be, concealed from you, or incorrectly reported, or exaggerated, you nevertheless must not despair of unravelling the truth. Do not jump hastily to a conclusion, hear with attention the patient's account of his ailments; marking, but not trusting implicitly to his statement of his feelings and impressions; then, taking nothing for granted, till verified, if possible, by your own observation, proceed cautiously and deliberately in forming your diagnosis; a question of vital importance to your patient.

In your inquiry pursue a regular and connected course; letting your questions follow, each its predecessor, in a natural sequence.

Thus your patient and his family will soon perceive that you are familiar with the subject, and will have confidence in your judgment, which is a very important element of success. But, if you wander about in your inquiry, or appear to hesitate, or to be in doubt, or at a loss, distrust of your ability is sure to follow. Ever remember that "people do naturally trust those that trust themselves." Though many sources of difficulty may spring up, – as hereditary constitution, local circumstances, changes in the cycles of disease, the question of fictitious or of factitious disease, and

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such like, yet attention will often enable you to overcome these difficulties.

Accustom yourself to observe closely and to reason on your observations, so that your clinical pathology may guide you to a correct diagnosis, and thence to a rational treatment.

For your conduct to your brethren, you may safely consult Percival's Ethics, and the code published by the Belfast Medical Society; you cannot wander far astray from the right path, if you adopt the golden rule, "Do unto others, as you would that they should do unto you."

If in any instance you shall differ in opinion from your co-attendant as to the nature of your patient's disease, or as to the treatment, whether you be the consultant or the ordinary attendant, do not estimate your own abilities as being far superior to those of your adjunct: – admit to yourself that *you* may perhaps be wrong in your views, and your brother right; and, with that feeling, quietly discuss the subject. If, however, you shall believe a continuance of the treatment to be fraught with danger, it will then be your duty to press for a change, and, if unsuccessful in your endeavour for change, you being the consultant, it may be necessary for you to retire from attendance on the case, unless a third practitioner be called in.

When called on to visit a patient in the absence of the ordinary attendant, or in consultation with him, be not anxious to make a change in the treatment, for the mere sake of appearing to do somewhat, and, perhaps, thereby filch away the credit from your brother; rather continue even the same formulæ, if it may be done consistently with your duty to the patient. Do not unnecessarily multiply your visits, nor by alarming the friends, when you are the consultant, induce them to request your too frequent attendance; but rather arrange with the ordinary attendant, the times at which you should return. On the other hand, if the patient shall have requested, either through you, or with your knowledge, the attendance of another practitioner in consultation with you, be not over anxious that the consultant should discontinue his attendance; but let every suggestion on that subject come either from the consultant himself, or from the patient or his family, unless your opinion be asked for. It may happen that the consultant, however careful he may be, cannot avoid holding conversation with the relatives of the patient, concerning the case, when the ordinary attendant is not present. He may be followed out of the house, or be waylaid in the streets, or called on at his own dwelling, and it may be sought to obtain an opinion from him. If you find

yourselves so placed, it will be your duty to say as little as possible; avoiding, however, any innuendo against a brother, whether by significative silence, or shake of the head, or shrug of the shoulders, or an expression of regret that you were not sooner consulted, or that you fear it is *now* too late. In his absence, do your brother full justice, not grudgingly, nor damning him with faint praise. Avoid yourself questioning the friends of a patient, on whom you are not in attendance, as to his state. To do so, or to declare uninvited, that you take a great interest in *his* case, or that you have made such cases your especial study, is of very doubtful propriety, and might be deemed a not very indirect mode of seeking to be called in.

In any misunderstanding with a brother-practitioner, be slow to get into print: let newspaper warfare be the last resource; few come unscathed out of such a skirmish. In Belfast, with its Medico-Ethical Society, there can be no excuse for such a proceeding. The kind advice and interference of a senior may do much; but neither to the Ethical Committee, nor to any friend should reference be made, till an explanation shall have been first asked from your supposed offending brother.

Attacks made, in your presence, on the profession in general, or against a member of it, in his absence, should be promptly repelled. You may, and perhaps should leave the defence of individuals to themselves, if present on the occasion of attack; but if it involve a charge against the profession generally, you, as a party accused or attacked, are called on for your defence.

It has been said, with truth, that the public is a hard taskmaster, and that society makes demands, often most unreasonable demands, on all who will admit such claims. It so happens that this said *Public* is pleased to consider medical men as bondmen, who are or should be but too happy to do its bidding. Much of this evil, for evil it is, is owing to ourselves, and we have little right to complain, if we suffer for our own weakness. This state of things will and must continue, till the profession shall act unitedly in asserting and defending their rights and privileges; but when will that day arrive? I may hope, but I scarcely expect to see it.

In former days, and of late there is no great change, medical men were considered fair game, whom it was good service to run down; and those novelists, and dramatists, and poets have been most lauded who, in the battue, succeeded in bagging the greatest number – you all are aware of the writers to whom I refer.

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Of the high position which our profession has attained in literature and in science, it is not my province here to speak, but if any shall talk slightingly as to the position medical men hold, let us tell such men "it is very true, that distinctive rewards have not been showered with a lavish hand on doctors." True, that, in the distribution of honours for services rendered during the late war, the allocation has at times been in the inverse ratio of merit: true, that an enormous amount of labour fell to the share of the medical officers, and that the labour was most faithfully performed, though death was too often the result of their devotedness: yet they flagged not: -

"Their loyalty was still the same,
Whether it won or lost the game,
True as the dial to the sun,
Although it be not shined upon."

Society has, however, claims upon you that you should not ignore; amongst others, the right to call on you to aid in every good and charitable work, having first set an example; but even though the public may have failed to do its duty, you will not, therefore, be excusable for the non-performance of yours. The question of remuneration I leave in abeyance. Among the onerous and painful duties required, and fairly required of you, there is none demanding more patience, and entailing greater anxiety and sacrifice of time, than the being obliged to give evidence on medico-legal inquiries. You may be called suddenly and unexpectedly to give evidence, where there will be no opportunity for preparation, therefore neglect not the study of forensic medicine. While there is a *legal* obligation on all to give evidence, if subpœnæd, society holds that there is, in addition, a moral tie or compact by which medical men are bound, and by virtue of which the public claim a vested right to the time, attendance, and skill of the medical practitioner. Percival, to a certain extent, admitted the claim, though neither you nor I can go the entire length of that eminent ethical authority.

Never volunteer your evidence, nor attend to give evidence, unless legally required. Witnesses, obliged to give evidence, have little or no power of controlling, or even directing it; they are subject to the examining barrister, who will promptly check any wandering that may not serve his client. Smith has compared the witness in our courts to "a harnessed horse in the hands of an able driver, whose duty it is to keep him in the direct road, and who will check and correct him if he wander from the right course."

The witness can depose only to *facts*, excepting in what regards matters of science, when he, perhaps, may be permitted, or even called on to tender

opinions; but some judges are opposed to such evidence, as being an usurpation of the rights of the jury.

In the witness box, avoid even the appearance of levity, no matter what may be the occasion. In giving your evidence, let not personal considerations have any weight; impartiality should be your guiding star: - Truth, no matter what the consequence may be, the one only thing to be elicited. Justice requires, at your hands, that the innocent shall go forth free and unstained, and that the guilty shall meet due punishment. On your evidence may depend, whether or not the murderer shall be loosed, still longer to infest society; - whether the innocent shall be restored to his family, or doomed to the hulk or the scaffold: when you remember your responsibility, so awful, you will be cautious.

On a late occasion (Palmer's trial), Lord Campbell said: - "A witness should not be turned into an advocate, nor an advocate into a witness." Be careful, therefore, that neither by speech nor gesture, you even appear to have a leaning to one side. Never fence nor endeavour to avoid a question; if the question be not clearly understood by you, quietly ask the questioner to repeat it. To questions of fact, answer briefly, if possible, yes or no, explaining afterwards, if needful; but state nothing unnecessarily. Give your evidence in plain terms, so as to be easily understood, avoiding obscure or very learned technical terms. If you be anxious to display your knowledge, you may easily do so; but you may get out of your depth, or you may be laughed at. Have a large stock of patience, you may, perhaps, require it all. Keep your temper, and display proper decorum, for though the examining counsel, by impertinent questions and an overbearing manner, may have forfeited all claim to your respect, yet your duty to the court should restrain ill temper, and cause you to avoid all skirmishing or intellectual warfare with the examining barrister, even though he may have left himself open to severe rejoinder. In reply to queries, state such facts as come within your own knowledge, and do not, unless required by the court, draw any inferences from the evidence given by others; if, however, having been present and heard the evidence given, you shall be asked your opinion as to the conclusions to be drawn therefrom, then give your opinion, which should spring only from well-grounded belief; be ready, if called on to state "the why and because."

Addressing the medical scholar on the duties which he owes to himself, I speak to old as well as to young, students and practitioners, for none are too

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old to learn. Remembering that “knowledge is power,” be earnest in the pursuit of science, which is the knowledge of the truth; and while you make medical science your chief aim, do not neglect general science, unless you are content to be outstripped in the race for distinction.

The spread of knowledge is now so universal that ignorance cannot hope for concealment. Think for a moment of the torture to which an ignorant man, in the witness box, may be subjected under the licensed rack of the cross-examining barrister, and then you will never permit the idea of contented mediocrity to cross your mind.

All your promptings should be onward, and if a stimulus be necessary to spur you forward, think how some have attained to eminence, notwithstanding every possible difficulty; not only do we know of men struggling upward in spite of poverty; but of others, ardent votaries of science, whose progress not even mental and bodily sufferings have arrested. If time permitted, what a crowd of illustrious names might I not parade before you. Need I remind you of Milton, and his blindness; of Prescott, the learned author of so many historical works; he also became blind, but continued his labours unabated; or is there any one here that has not read of the perseverance against difficulties, which led Franklin higher and higher till he reached the pinnacle of his greatness?

Again, some of you may have enjoyed the lectures of the late Sir W. Hamilton, Professor of Logic and Metaphysics in the Edinburgh University: he, though struck by paralysis of one side, affecting, to some extent, his speech also, nevertheless continued his labours, lecturing and writing almost till the close of his brilliant career.

But how far do all those examples fall short of the devoted zeal of the French historian Thierry, the author of the Conquest of England by the Normans, and of the Merovingian era. Afflictions, the result of his too intense study, were heaped upon him; he became blind, then paralysed, so that he could not even hold the pen, and he was quite incapable of motion; yet, as he himself said, never was his march over the difficult ground of history firmer or more assured than when he was guided onward by the brightness of the inward light alone. In the midst of his sufferings he preserved his cheerfulness, and his conversational powers, which were of the first order, continued unailing to the end. Hear him speak in the preface to one of his works:

“Si j’avais á recommencer ma route, je prendrais celle qui m’a conduit ou je suis. Aveugle et souffrant, sans espoir et presque sans relache, je puis

rendre ce temoignage, qui de ma parte, ne sera pas suspecte; il y a au monde quelquechose qui vaut mieux que les jouissances materielles, mieux que la fortune, mieux que la santé elle même; c’est le devoement a la science.”

Let the *faineant*, the sluggard, read this and blush.

After such examples, who would not strive? “You cannot all command, but you may deserve success,” therefore would I advise you to compete for every one of the few prizes our profession has to offer, and though unsuccessful, your labour will not be altogether unprofitable, as you will have acquired knowledge, and have had an opportunity of making your value known.

To the observant physician, there is no such thing as chance; he knows that every effect or symptom has its cause; it is his duty to ascertain that cause, and to trace out the necessary sequence of cause and effect. Unless he do this, his practice will be mere empiricism; but if he observe accurately, inquire minutely, and reason coolly on what he has observed, he will do well. Some physicians, even in our days, owed much of their success to their powers of observation and their shrewdness in balancing probabilities. But on the correctness of his prognosis will the reputation of the practitioner, at least with the public, mainly depend. You should therefore be cautious in forming, still more in pronouncing it. To the family and friends it should be guarded, not gloomy; to the patient your prognosis should be as cheering as a strict adherence to truth will permit.

The young practitioner, just entering on his career, full of hope and trust, believes that medicine is all powerful, and that every disease must and will yield to his remedies; till, after sundry grievous disappointments, to him strange and unaccountable, he perhaps loses confidence in his own judgment, or becomes a sceptic as to the effects of medicine; avoid both these errors and success will crown your honest endeavours.

Be not anxious to cultivate one branch or department of medical or surgical practice, to the neglect of others; but make yourself familiar with all. On the question of specialities, much has been already, and more may yet be said, both for and against, and while some urge that specialties are apt to lead the practitioner to take a narrow or even a microscopic view of the favourite department to the neglect of others, perhaps more important, we can here point to examples of men, eminent in special branches, who are not behind their brethren in the other departments of medical science.

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Avoid quackery, and discountenance it under whatsoever form it may appear, all advertising and other puffery included. As regards mesmerism, homœopathy, hydropathy, kinesipathy, and all the other *pathies*, which have for some time been distracting or amusing the public, I will not for a moment detain you by arguments, as I feel satisfied that your love for true science will not permit you to be led astray by such *ignes fatui*.

The physician should not have any pecuniary interest in directing his prescriptions to a favourite establishment; but should ground on merit alone any recommendation he shall give; else his motives for prescribing may be suspected or misinterpreted.

In your converse with your brethren, be modest and unassuming, not prone to take offence, and to construe into intended insult every unguarded word or look. Men will avoid you if you be fretted by every trifle.

In conclusion, above all, do not go motive hunting, nor attribute to the jealousy of your fellows every disappointment you may experience: – Wait patiently – time is a great physician, and works wonderful cures in bringing every one to his proper level. I offer this as a brief and imperfect outline, leaving for abler hands to fill in much that I have left untouched.

As regards the prosperity of the Clinico-Pathological Society, we have reason to feel confident: already we have above 120 members, and you will find on your notice paper the names of many candidates for admission. Since the close of our last session, however, death has made a sad inroad among us, and we have lost more than mere numbers can replace. It appears but as yesterday since our late President, Dr. Malcolm, commenced his career among us, in the morning of his life, so bright and sunny, full of hope and promise: and we have seen the hope and the promise disappointed, and his sun set; but it set unclouded and in full meridian brightness. The voice that addressed us so eloquently, but a few months since, is now for ever stilled, and the wise counsel, that aided, is lost to us; and yet we have much to cheer us, and to assure us that this society, of which he was one of the founders and chief supports, will go on prospering: for I hope and believe that his spirit still animates you, my friends, and that you will consider it a tribute due to his *memory* to take care that this institution, to which he was so devoted, and to which he gave so much of his energies, shall still flourish. On the other hand, if, through the apathy or wilful neglect of any of its members, its reputation should sink, or its usefulness be lessened, think how it

would grieve him, were he present with us. Let us, then, all join in the determination, communicated to me by some of our members, that the loss of our late much loved President shall stimulate us to increased exertions, so that the Belfast Clinico-Pathological Society shall remain a lasting testimony of his exertions for the improvement of our profession and the spread of medical science. With a mind like his, and with such energy, had he been spared, what bounds could we put to his career? Ever pushing onward, difficulties never discouraged him, never arrested his progress; they served but as incitements to increased exertions, and he preferred to wear out rather than to rust out. Ardent *himself* in the pursuit of knowledge, he had the rare faculty of infusing the same spirit into those with whom he came in contact.

To you, our younger brethren, I would say, take *him* as your *model*. His watchword was *persevere* – “Nil actum reputans, si quid superesset agendum.”

William McGee

Presidential Closing Address

Belfast Clinical and Pathological Society

1st May 1857

GENTLEMEN, – In my inaugural address I brought under your notice some of the more important duties of the physician, and I have selected, as the subject of my present discourse, the progress of science during the present century, more especially of medical science, and its collateral or allied branches. Progress, which, like the river flood, ever rolling onward, ceases not to swell till it overflow and fertilize the thirsty, barren land it passes over – progress, than which, of all the laws stamped on the universe, we shall find none more deeply impressed.

Those who love to trace back the spring of all knowledge to ancient days, believe that it had its source in the East, and flowed thence, with a fertilizing current, westward: and true to the spirit of the *Laudator temporis acti* – they dwell on the glories of bygone days – lament how degenerate we have become: and pointing to the poets, painters, sculptors, orators, dramatists, historians, philosophers and physicians, of Egypt, Greece, and Rome, they ask, where in these days we can find an equal to the men of note who then flourished? It is true they were giants in their time, yet we also can boast of the celebrities of our days.

If, in this onward march everywhere observable, mental science has, as some assert, made less progress than physical science, it is chiefly owing to the more attractive character of the latter branch; still we cannot fail to observe the mutual dependence of all departments; for we shall find none that does not give to, and receive from, every other department, material aid, thus forming, when united, one firm chain, every link of which is of importance to their common bond of union.

It would be to take a very narrow view, if we classed, for instance, natural philosophy and chemistry, as subjects merely of amusement, or relaxation from other studies. There are few of the later discoveries, in these departments, that cannot be shewn to be of primary importance in promoting the health or the worldly comfort of man.

How ennobling to the name of Davy has been his safety lamp? Of less brilliant pretensions, yet of much value to the artizan, is the simple but effectual means of preventing that fatal disease, “the dry grinders’ rot,” viz., the use of the magnet, which arrests the fine steel dust, formerly inhaled; in short, I may ask, what art or trade has not been benefitted by

chemistry or natural philosophy?

In our own department, the anatomist is indebted to the microscope for his knowledge of the minute structure of tissues, healthy as well as diseased. Again, when some careless observer shall inquire how the discovery of the polarization of light, which he views as a mere amusing trifle, can possibly benefit man, to those who are in the habit of using the microscope, the value, indeed the necessity, in certain cases, is well known; but on a more important point, let us hear what Arago says. He has shewn that polarized light, which is contained in the moon’s rays, in the light from the clouds, and in all *reflected* light, *carbonizes*, while *direct* light *oxygenates*; hence the unhealthy effects of the light in the dwellings of the poor, situated in narrow alleys, reflected from opposite walls, as compared with direct light. But not alone does the kind and amount of light enter materially into the sanitary condition of dwellings, but colour also must now be considered an important agent. (Dr. M’Gee here referred to an article in the *Dublin Medical Press*, shewing that rooms coloured yellow were productive of disease among the inmates, which disappeared on the white-washing of the walls; and he observed in confirmation of the theory, and as a proof that it was not a mere coincidence, the effect of yellow light in preparing for photography).

Again, where it is proved to us that the electric, galvanic, and magnetic fluids, and even highly concentrated steam, are identical, we must not consider such knowledge as unimportant. Scoresby, that ardent votary of science, made a voyage of 30,000 miles, out and home, for the sole purpose of testing his theory of magnetic deviation on shipboard, thus benefitting man as regards navigation; then in furtherance of physiology, we find Dr. Radcliffe asserting, as the result of actual experiment, that an electric current exists in a muscle of the body during rest, and ceases during contraction; that then, as also during cadaveric rigidity, the needle of the galvanometer stands at zero, and that it is by neutralizing the already existing natural electric current, that artificial electric currents produce contractions in a limb.

It would be to prolong this single question of magnetism or electricity to an infinite extent, if I entered on the various modes of generating those powers, or the laws that govern them; hereafter I perhaps will refer to some of their uses.

In natural history we find some lessons of importance; among the many that press on us, and injuriously effect our interests, I may remind you of the *Tænia*, and *Cysticercus Cellulosus*, and their

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transformations; and the student of skin diseases will have brought vividly before him the vegetable and animal parasites.

Yet, notwithstanding all the benefits she has conferred, science has been accused of fostering crime, by the facilities afforded for its perpetration; in her defence we can plead that science has deprived the criminal of all reasonable chance of escaping with impunity.

The electric telegraph enabled the officer of justice to arrest in his flight, and bring to punishment, the murderer Tawell. The microscope, by its revelations, gave the clue to the detection of the gold dust robbery, and enabled the observer to prove the forgeries of the Uranius Manuscripts; and if last, certainly not least among its triumphs, the microscope has shewn forth, in all their enormity, the food and drug adulterations. Photography has, with other discoveries, in some degree aided the forger in victimizing the unwary; but in return, as has been well observed, "it takes and multiplies the felon's portrait, and so insures his capture." Chemistry may aid, and may have aided the secret poisoner, in effecting, with some degree of certainty, his wicked designs: but it has done much to lessen his hope of escape; and the question of Hamlet, "How long will a man lie i' th' earth ere he rot?" would now receive a different reply from the philosophizing grave-digger, and it would not be merely, "I faith, if he be not rotten ere he die, he will last you some eight or nine year. A tanner will last you nine years; for his hide is so tanned with his trade, that he will keep out water a great while;" for we know now that some poisons serve, as it were, to embalm their victims, and so secure evidence for the conviction of the murderer.

If Marshall Hall had in no other way benefitted science, his application of the frog as a strychnometer, as well as a galvanometer, would immortalize him. He thus detected $1/2500$ part of a grain of acetate of strychnia.

In considering what are the qualifications requisite for an accomplished physician, it is manifest he should be sufficiently well acquainted, not with languages alone, but with general science; a man not merely of one idea, or devoted entirely to medical pursuits, in the ordinary sense of the word; but a man of varied accomplishments and enlarged ideas. Currie of Liverpool was not less estimable as a physician, or Charles Bell as an anatomist and surgeon, because they travelled into the field of literature and general science; and our profession can boast of many such ornaments.

Medical science, like a goodly tree, spreading

far and wide, and drawing life and strength from every quarter, despises not the aid and support afforded by the humblest plant, repaying by its shelter, when at maturity, the aid formerly lent to it. Closely connected, as it is, with its allied branches, it would be difficult to draw the line of demarcation, and say that here or there the province of the physician ends, and that of the anatomist, or surgeon, or chemist begins.

Medicine, as a science, has had many difficulties to contend with, which have retarded its progress. Of these difficulties, the most obstructive, perhaps, has been the system of theorizing. It has been urged that there have been more false facts than false theories; perhaps people should rather say, "ingenious theories, that make the meat they feed on." Be that as it may, we cannot but feel that the theories of spasm, the Brunonian theory, the theory of inflammation, and many others, have been the drag on the wheel of science. These, and various other theories, which sank as rapidly as they rose, failed because they were applied each as a *master-key* to unlock every door. We have seen some sink, to rise again with greater brightness; and in reviewing the history of medicine, nothing can be more strange than that of the Humoral pathology; this for a time exploded and forgotten doctrine, has again appeared, and we have clearly displayed by the aid of chemistry and natural philosophy, through the microscope and chemical analysis, facts of which the Humoral pathologists, in days of yore, got but an indistinct glimpse. Many late discoveries confirm the truthfulness of the Humoral or Blood Pathology. I may here instance, as the result of medical research, amyloid, or starch degeneration, fatty degeneration, pyæmia, uræmia, Bright's and Addison's diseases, the intimate and almost necessary connection between certain diseases, or diseases of certain organs, as for instance, heart, brain, and kidneys; and the diagnosis between the idiopathic and symptomatic forms of some ailments, may be classed among the valuable labours of our physicians. I will merely name the now almost settled question of the non-identity of typhoid and typhus fever – a question all important, and leading to some important pathological results; simply observing that Professor Huss, of Stockholm, dissents from the opinions of Louis and Jenner.

In mental disease, though the moral and non-restraint system have done much, yet the labours of William Tuke, the quaker, and his cotemporary Pinel, leave much still to be effected.

Industrial pathology, in addition to the instances already quoted, has to acknowledge many

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other boons that she has received from the chemist; in illustration I have to refer to the proposition of Liebig, who would prevent lead colic by keeping the men engaged in lead manufactories charged, so to speak, with sulphurous acid.

Vital statistics and medicine mutually act and re-act on each other; and people are now, from witnessing the results of statistical returns, forced to admit that the influence of offensive and objectionable trades operates powerfully on health, and on the duration of life; and that they are indebted to the physician for the evidence that famine and pestilence stand in the relation of cause and effect.

The statement put forth that many of our sufferings are self-inflicted – that much of the disease men labour under, especially of the class termed zymotic, a name of itself conveying much to our minds – that a large portion of the ailments that are daily and hourly shortening the brief span of our existence, is preventable, *startles* us; but does it lead us to adopt preventive measures?

Have the statements again and again trumpeted in our ears, that when disease visits the cottage of the poor, it seldom passes by without leaving a summons at the palace of the rich, made any change in our plodding policy? But if men are to be guided only by mere money considerations – by the *argumentum ad crumenam* – then, in following up the financial view of the subject, we may remind all such that preventable disease does much to fill our workhouses; and it might be worthy inquiry what cost the death of one head of a family entails on the poor-rate.

I will not detain you with the history of the sanitary reform movement, lately roused to a state of active progress by the efforts of some benevolent but bold men – men earnest in carrying out their honest views, bold in setting at nought public ridicule, and persevering in their efforts to induce others to join their ranks; but I must claim for my medical brethren of the army and navy, the merit of being the pioneers in leading what might then be considered a forlorn hope against existing evils. I give due credit to Howard, who carried into active operation, in civil life, the suggestions given by the example of our military and naval surgeons.

The labours, in late days, of Southwood Smith, Chadwick, Arnott, Kay, and Gavin, are now matters of medical history; and the “Enquiry into the condition of the Dwellings of the Poor,” and “Snow’s Researches,” are no mean additions to our medical literature.

I cannot, however, pass by in silence the important data as to the statistics and geography of

disease, supplied by the reports and returns of our naval and military surgeons. By them we are instructed as to the influence of season, locality, temperature, latitude, age, and even diet, in the production of disease; thus following up the observations of Humboldt as to the effects of mere altitude in checking yellow fever. By these returns we find that while some diseases prevail only in certain zones and isothermal lines, others are ubiquitous. We moreover now know that human epidemics are coincident with, or follow close upon, if they are not governed by epidemics among the lower animals. Again we are reminded, in our sanitary measures, when warned by offensive smells, not to be satisfied with the removal of the odour, but to remove the cause also; and not to consider deodorizers and disinfectants identical. The using a mere deodorizer has been quaintly compared to the “putting a clean shirt over a dirty skin.”

The physiologist, far from idle, has taken a first-class place in the race. We have had produced to us the nerve theories – not mere theories – of Charles Bell, and Marshall Hall, and Browne-Sequard, ardent and devoted labourers in the field of nature. Our present knowledge of the structure, and functions of the pancreas, spleen, liver, and perhaps of the supra-renal capsules also, is tolerably correct; and among the latest additions to our stock of knowledge is Richardson’s discovery of the cause, or supposed cause, of the coagulation of the blood.

Medicine has had vast and important additions made to its list of therapeutic agents; and I shall only contrast the mode of curing intermittent fever proposed by Mathew Henshaw in 1677 – viz, the condensing or attenuating, as required, the air in a chamber, at the same time ventilating by the action of common organ bellows, with the use of quina. The merest tyro would deem me trifling if I mentioned cod-liver oil; but the most remarkable propositions we have had placed before us are, “the Ready Method” of Marshall Hall, for restoring suspended animation, and his tracheotomy in some forms of epilepsy.

Looking back to the state of chemistry at the beginning of the present century, and then considering what we have since had revealed to us, we find a state of things setting at defiance nearly all our preconceived opinions. We find the earths and alkalis of those days now proved to be metals. We see metals no longer distinguishable by ponderosity, or almost any of their former characteristics. We know that many of the bodies, then considered elementary, are not only compound, but have actually been resolved into what we, for the present, believe

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to be their primary elements. Can we be certain that the voltaic pile has revealed to us all the wonders of creation? Who will now venture to assert that other and more powerful agents will not be discovered, enabling future chemists to outrival Davy and his compeers? Can we be assured that even one of our gases, hydrogen, is not really a metal? There are some analogies that make the idea more than possible. We have seen, in our times, strange metamorphoses: We have seen common clay, or rather its alumina, converted into a metal, brilliant, sonorous to a high degree, ductile, malleable, not easily oxydizable by the atmosphere, and non-magnetic. It was originally obtained from cryolite, a Greenland mineral, but its present price is not much above the price of silver, while its specific gravity is much less. Sanguine chemists express a belief that aluminium will be produced from clay, at a price as low as that of iron. Should this belief prove well-founded, what a revolution may be thereby produced, especially in ship building, aluminium being non-magnetic. Chemistry has taught us, not only how to separate or divide compound bodies into their primary elements, but also to combine and form, or reform, some substances from their elements; and here it is that the atomic theory of Dalton has done good service. Oil of mustard and taurine have been thus produced; and Daubeny, last year, announced the formation of several species of alcohol from coal gas, and the manufacture from guano of a beautiful crimson, rivalling cochineal; but you are aware that alloxan, with its rose-colour, ranging up even to deep crimson, and murexid, both obtained from guano, are products derived from uric acid, one of its constituents.

In science, names have not always been correct definitions of things. We now find chemistry rendering one name appropriate, inasmuch as photographs are now, or *may* now be light writings, instead of necessarily being sun pictures; they may now be produced by powerful artificial light, as that from sulphur burned in oxygen, or from phosphorus.

Chemistry has given material aid to the physician in his inquiries; has enabled him to verify Bright's discoveries, and to demonstrate, not only the existence of glucosuria in gravid, and in 50 per cent. of all nursing women, but to prove moreover, that glucosuria, being in the direct ratio of milk secretion, in the lower animals as well as in the human species, would serve as a good test of the value of a nurse.

In the industrial arts, chemistry has led to the adoption of many new and economical processes; while in the cure of disease our treatment has

become more and more precise and effective, since the separation and purifying of the vegetable alkaloids.

Improved articles of food for our hard-worked soldier and sailor – such as preserved fresh meats and fish, and compressed vegetables, condensed eggs, &c., &c. – are amongst the boons given us by chemistry.

If, during the present century, the advancement of medical science has increased the average duration of human life – and the truth of the statement cannot be denied – we may equally claim for surgery the merit of having borne a fair share in the good work. In endeavouring to select subjects in illustration, one feels embarrassed by the superabundance, rather than by the lack of material.

Hæmorrhage, once the surgeon's dread, has now lost its terrors; and when we but think of the painful means formerly in use, we are surprised that the modern improved treatment was not sooner adopted. The ligature of arteries, in amputations and other surgical wounds, naturally led to its use in aneurisms – in popliteal, and afterwards, as we became more assured, in other aneurisms. The first attempts to tie the common carotid, the subclavian, the external and internal iliacs, *may* be remembered by some present, and the endeavour to prolong life by tying the abdominal aorta, in Dr. Monteiro's case, the patient dying on the tenth day of secondary hæmorrhage, *should* be in the recollection of the youngest of you. The first attempt to ligature the internal iliac was made in Jamaica, that of the abdominal aorta in Rio Janeiro – both within the tropics!!

Not satisfied with the triumphs he has obtained, the surgeon seeks further victories over disease and death, by the application of the ligature to the distal side of the tumor, when there may not be space on the proximal or heart side. Beyond this a further advance has been made, in the treatment of aneurism by pressure – an improvement originating in our own island. Conservative surgery, however, has more brilliant trophies to boast of: witness the resection of joints – of the elbow, shoulder, knee, and hip joints. Under conservative surgery may be classed plastic surgery, now so general. Adopted in Egypt and India in the fifteenth, and by Taliacotius in the sixteenth century, it was brought into notice in England by Lucas in 1803, and in 1814 by Carpue, whose success gave it a firm basis. Urethroplastie, first practised by Earle and Sir A. Cooper; and staphyloraphe, by Roux, in the case of my college friend, Professor Stevenson, of Montreal, were added

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to the triumphs of surgery. A good surgeon is no longer a man who is merely a *good cutter*; the desideratum being how much may be saved, not how much may be removed. I by no means object to legitimate operative surgery, and do not recommend for your adoption the course which Haller pursued, as he himself tells us in his biographical account, in his *Bibliotheca Chirurgica*. Eminent as he was as a dissector and consulting surgeon, and for seventeen years professor of surgery, he never ventured to operate on the living body – “*nervis ne nocerem veritus*.”

When I merely name lithotrity, tenotomy in cases of contracted joints, as well as in talipes, Symes, perineal section, and the reduction of dislocations by manipulatory movements, so long urged on the student by John Barclay of Edinburgh, what a field is opened to our view. War, in itself a monstrous, though at times perhaps a necessary evil, has enabled the navy and army surgeon to contribute much to our stock of surgical knowledge, and the opportunity so afforded has been turned to good account by the establishment of chairs of military surgery in London and Dublin – a boon conferred on the metropolis of Scotland soon after the battle of Camperdown, at the instance of John Bell. In its advance, surgery has been greatly assisted by the chemical and physiological reasoning of Simpson and others; for it may fairly be questioned if, without the aid of ether, or chloroform, or amylene, operative surgery would have made such progress. These and other anæsthetics, as cold, aconite, and belladonna, by lessening the nervous shock, have greatly diminished the mortality after capital operations.

You all know that the road to the Temple of Knowledge is rugged and beset with difficulties – that the path is steep and toilsome; but though it be so, each step upward fully repays the fatigue; and the higher you ascend, you are the more raised above the clouds of prejudice, and obtain such views of the promised land of science as are forbidden to the low grovellers on the earth. Knowing, then, that such is the route to the promised land, how grateful should the student of these times be for the facilities afforded him by the labours of those who have preceded him. He has now to guide him onward the experience of many who were obliged, as it were without a pilot, to grope their way in doubt and uncertainty. We have, in the works of our predecessors, an amount of medical and surgical knowledge which the most lengthened life and extended practice could not of itself supply. On every subject in medicine, surgery, and their allied

branches, we have special treatises or monographs, giving us the accumulated experience of all former authors; thus affording abundant sources from whence the student may drink deeply.

Rapid as has been the march of improvement in every walk of medical science, there yet remains much to be done, leaving ample ground for profitable labour. If we may judge of the future by the past, a large field is open to the student anxious for a knowledge of the truth. Will the physiologist tell us why the mere *malposition* of certain secreting glands should prevent the efficient performance of their normal duties? Why cryptorchidii, men as well as the lower animals, should be incapable of fecundating? – why no spermatozoa are discoverable by the microscope in their seminal fluid? Will the chemist pronounce for us whether the presence or absence of ozone in the atmosphere be the cause or the effect of certain epidemic diseases? – or can he declare whether this ozone be a distinct appreciable substance, or merely an allotropic condition of oxygen? Or will the chemist aid us in preventing the disease of the jaw-bones caused by the phosphoric acid in the manufacture of lucifer matches?

Never consider any discovery unimportant, however trifling it may seem to be. Let each new fact serve as the means of further advance. It may be, that though in appearance trifling, it will prove to be the one link wanting to complete the chain of evidence by which some important theorem shall be superseded. For instance, after Serostus had, in 1553, announced the pulmonary circulation, Cæsalpinus the swelling of the veins below the bandages in bleeding, and Fabricius, in 1574, the the valves of the veins, our immortal Harvey, connecting these links with his own discoveries, at length, in 1628, gave to the world his account of the circulation of the blood. Harvey proceeded on the principle that every effect must have a cause, cause and effect being in indispensable union; that there could be no such thing as chance or accident; and that it was the duty of every philosopher or lover of wisdom to search out carefully the rationale of every result. Thus acting, Leverrier and Adams foretold, not only that a disturbing cause acted on certain planets, but they pointed to the very spot in the boundless firmament where that element of disturbance should be found; and accordingly the telescope verified their inductions by the discovery of the planet Neptune. They were led to their convictions by reasoning on irregularities they had observed in the motions of Saturn and the Georgium Sidus.

In your pursuit of knowledge let not any

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unworthy motive sway you, but love knowledge for her own sake. That strange old author, Bernard, says – “*Qui scire volunt, eo fine tantum ut sciant, turpis curiositas est; qui scire volunt, ut sciantur, turpis vanitas est; qui scire volunt, ut scientiam suam vendant, pro honore præmio, &c., turpio quæstus est; qui scire volunt, ut ædificent, charitas est; qui scire volunt, ut ædificentur, prudentia est.*”¹

In conclusion, permit me, gentlemen, to thank you for the kind and able support you have on all occasions afforded me. To you I am indebted for my duties having been so easily performed. I have further to congratulate you on the increasing prosperity of the Belfast Clinico-Pathological Society; on the position it has obtained, and the high character it deservedly enjoys.

To say that the session now brought to a close has been prosperous to the Society and profitable to its members would but faintly express what I believe you all feel. The discussions have been truly practical, and that man must have been dull indeed who did not derive benefit from them. For myself I have to admit that week after week I found instruction in all that I saw and heard – a further proof of the adage, that it is never too late to learn. With an increasing list of members – those members fully impressed with the advantages of our weekly conferences – your prospects are most promising; and I have no doubt that your progress will be continuous. *Esto perpetua!*

¹ The full quotation seems to be:

*Sunt qui scire volunt tantum, ut sciant, et turpis curiositas est.
Sunt qui addiscunt et scire volunt, ut sciantur, et turpis
vanitas est.*

*Et sunt qui scire volunt, ut scientiam vendant pro pecunia, aut
honoribus, et turpis quaestus est.*

Sunt qui scire volunt, ut alios aedificent, et caritas est.

Et sunt qui scire volunt, ut aedificentur, et prudentia est.

There are those who want only to know, and that is foul curiosity.

There are those who learn more and want to know, to be known, and that is foul vanity.

And there are those who want to know, to sell knowledge for money, or for honours, and that is a foul source of profit.

There are those who want to know, to edify others, and that is charity.

And there are those who want to know, to be edified, and that is prudence.