An introductory lecture to a course of surgery, delivered at the Richmond School of Medicine, Dublin, on the 8th day of January, 1827 / by Richard Carmichael.

#### Contributors

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# **INTRODUCTORY LECTURE**

TO A COURSE OF

# SURGERY,

#### DELIVERED AT THE

# RICHMOND SCHOOL OF MEDICINE, DUBLIN,

ON THE 8TH DAY OF JANUARY, 1827.

BY

RICHARD CARMICHAEL, Esg. M.R.I.A.

ONE OF THE SENIOR SURGEONS OF THE RICHMOND SURGICAL HOSPITAL.

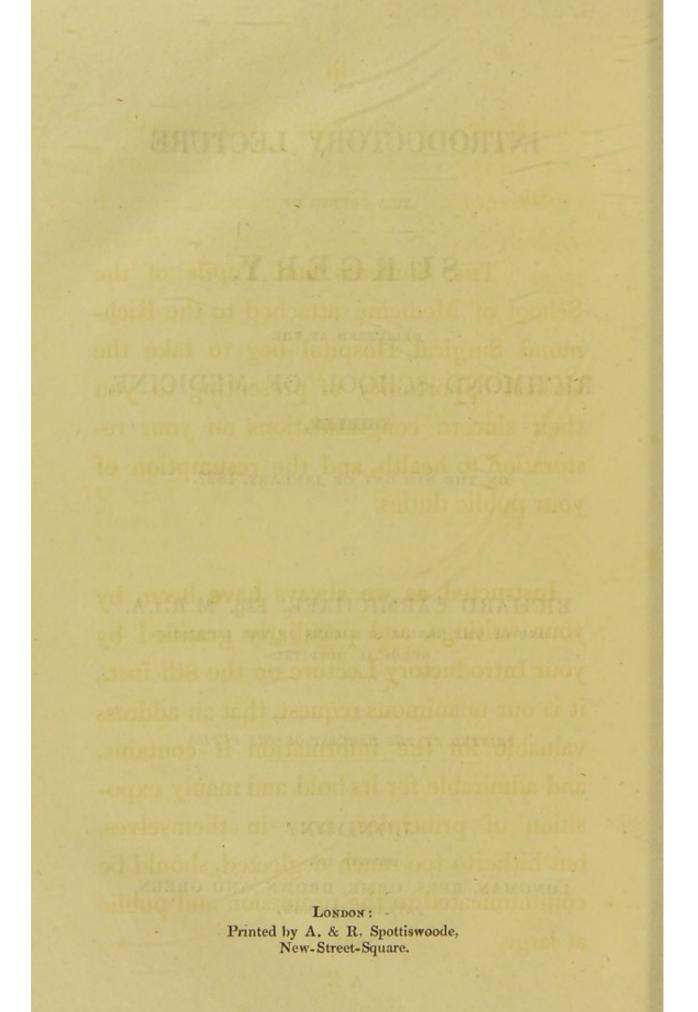
PRINTED AT THE REQUEST OF THE PUPILS.

## LONDON:

PRINTED FOR

LONGMAN, REES, ORME, BROWN, AND GREEN, PATERNOSTER-ROW.

1827.



SIR,

THE Students and Pupils of the School of Medicine attached to the Richmond Surgical Hospital beg to take the earliest opportunity of presenting to you their sincere congratulations on your restoration to health, and the resumption of your public duties.

Instructed, as we always have been, by your writings, and peculiarly gratified by your Introductory Lecture on the 8th inst., it is our unanimous request, that an address valuable for the information it contains, and admirable for its bold and manly exposition of principles, true in themselves, but hitherto too much neglected, should be communicated to the profession and public at large. Should you consent to its publication, be assured, Sir, that we shall consider it as a great addition to the obligations under which we already lie to you, and that we anticipate from its extension the most valuable results.

## We remain, Sir,

# Your most humble Servants,

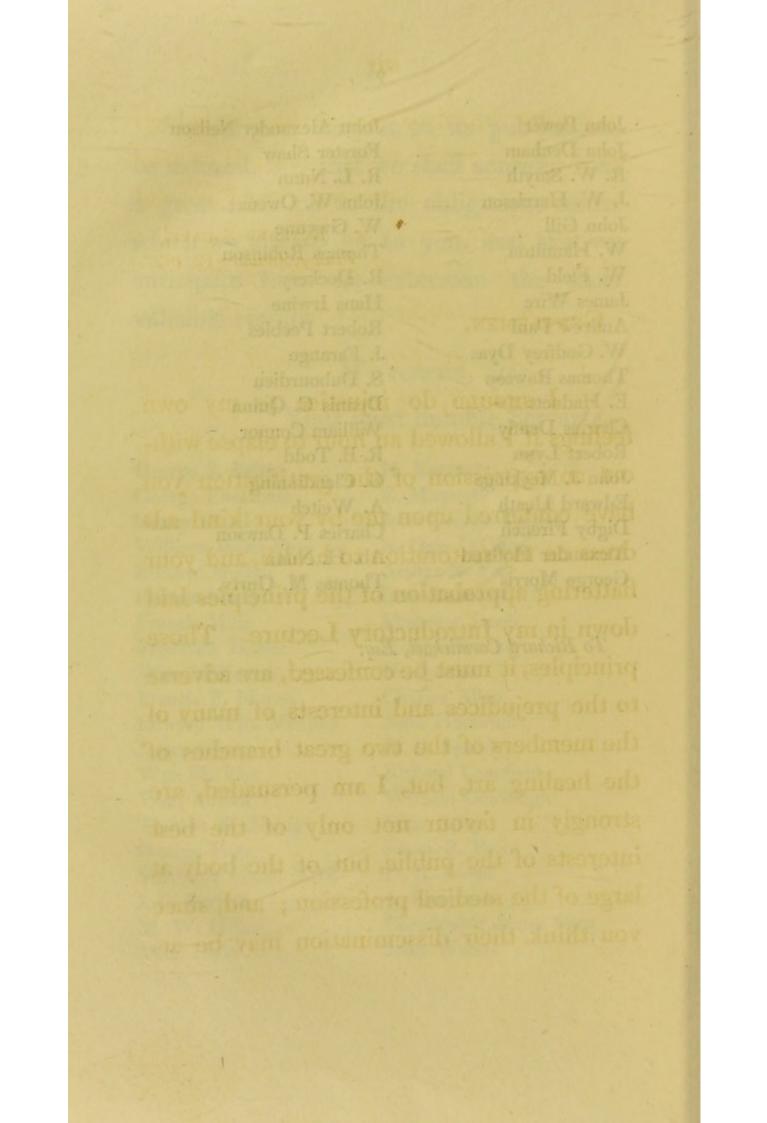
George S. Belton George Cheetham Henry Flood William James Shea **Richard Mollan** Patrick Beatty Francis Mills Frederick Hasler Wm. M'Kenna Francis F. Moran Edward Wm. Murphy James Moran Wm. M. Vise Wm. Adrien Thomas B. Young George Page Valentine Flood, M.D. J. C. Barrett M. W. Hilles Wm. Irwin

H. Kennedy E. Maxwell John George Dalton N. Ogle D'Olier Arthur R. Fea Geo. Kennedy Ebenezer Jacob Henry Shorting M. Burton Charles Allen John Hamilton R. D. Speedy **Richard Cranfield** William Colclough Wm. Alley James R. Brien D. R. Lloyd A. Hamilton Christopher James Shea John Waters

John Power John Denham R. W. Smyth J. W. Harrisson John Gill W. Hamilton W. Field James Wire Andrew Paul W. Godfrey Dyas Thomas Rawson E. Hadnett Charles Denny Robert Lynn John J. Meekings Edward Heath **Digby Ffrench** Alexander Holland **George Morris** 

John Alexander Neilson Forster Shaw R. L. Nunn John W. Owens W. Gwynne Thomas Robinson R. Dockery Hans Irwine **Robert Peebles** J. Farange S. Dubourdieu Dennis C. Quinn William Connor R. B. Todd G. Clendinning A. Weitch Charles P. Dawson Ab. H. Nunn Thomas M. Gurty.

To Richard Carmichael, Esq.



RUTLAND SQUARE, Friday, January 12. 1827.

tended with advantage. I with

GENTLEMEN,

I SHOULD do injustice to my own feelings if I allowed an hour to elapse without an expression of the gratification you have conferred upon me by your kind address on my restoration to health, and your flattering approbation of the principles laid down in my Introductory Lecture. Those principles, it must be confessed, are adverse to the prejudices and interests of many of the members of the two great branches of the healing art, but, I am persuaded, are strongly in favour not only of the best interests of the public, but of the body at large of the medical profession; and, since you think their dissemination may be attended with advantage, I with pleasure consent to the publication of the address you have so highly honoured.

I am, GENTLEMEN,

With regard and esteem, Your obliged and sincere Friend, RICHARD CARMICHAEL.

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To the Pupils of the Richmond School of Medicine.

# INTRODUCTORY LECTURE.

# GENTLEMEN,

IT was my intention, at the opening of this school, to have given you my sentiments on the present state of medical education in this country, and the improvements of which I considered it susceptible; to explain the plan we purposed to pursue in this establishment, and to subjoin some hints on the most advantageous mode of pursuing your professional studies. But, unfortunately, on the very eve of our undertaking, I was disabled from appearing before you by one of those unexpected and unwelcome visitations, which so rapidly bring the life into jeopardy, and to which the medical profession are so peculiarly and necessarily exposed. But I have to thank

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you warmly and sincerely for the kind and affectionate interest you took in my recovery; and, now, at the earliest day at which I feel myself adequate to the task, I come to redeem my pledge to you and to the public. My colleague, Doctor M'Dowell, by a strange copartnership in misfortune, was, at the same moment, also rendered incapable of contributing his valuable assistance, by a similar, but, I am happy to say, a slighter attack of fever : so that nothing could be more inauspicious than the commencement of our school. Mr. Adams, however, stood in the breach: the school was opened at the time announced; and notwithstanding the disadvantages we encountered, we feel ourselves already supported to an extent which few recent establishments can boast. We are now about to enter upon the surgical part of the course, and I shall take this opportunity of enforcing the several topics which have for some time occupied my mind, and which I think most worthy of engaging your attention.

The several new schools of medicine which have of late made their appearance in this metropolis, tend in some degree to evince that the odium attached to Irishmen in not availing themselves of the local advantages which their country affords, cannot with justice be affixed to the surgical profession. The surgeons resident in Dublin, however small in number, it must be admitted, form a remarkable and praiseworthy exception to an imputation, which I fear is too generally true with respect to their countrymen. It is only now, however, that medical men seem to open their eyes to the advantages which Dublin affords for the establishment of medical schools; advantages which are far superior to those of any other city in the empire. We abound with dispensaries, hospitals, and charitable institutions of every description, calculated to alleviate the various maladies entailed upon man; and without which, a city like Dublin, with a pauper population, perhaps exceeding in proportion that of any other city in the world, would soon become one vast scene of desolation. But as it is the wise dispensation of Providence to make "good arise out of evil," let our profession but avail itself of those local advantages which this metropolis affords, and we may turn the very poverty and disease with which it abounds into blessings of the highest importance, by affording to the empire an annual supply of well-informed medical practitioners, which no other part of the United Kingdom could educate equally well at the same moderate expense.

The difficulty of prosecuting anatomical pursuits in the sister country, induces vast numbers to seek that information in foreign states, which cannot be obtained at home; but if the advantages of Dublin as a school of anatomy and medicine were once sufficiently known and promoted, no longer would we find pupils emigrating to distant countries to acquire, at a great inconvenience and expense, that information which is to be obtained on the most œconomical terms in the second city in the empire; and which at the same time contains within itself opportunities for the acquirement of every branch of professional knowledge.

There are twelve respectable hospitals, among which we boast of a lying-in hospital, not equalled in the world for extent, magnificence, and utility; two extensive botanical gardens, with a professor of character and learning attached to each; two public lecturers on chemistry, the one the learned professor of Trinity College, the other of the Dublin Society; and also several private lecturers on chemistry. Besides the school of medicine conjointly formed by the university of Dublin and the college of physicians, and the school of surgery of the college of surgeons, there are three or four private schools, each containing professors in every branch of medicine; and, I trust, ere long many others will be added to the number: for we are not to consider that the great advantages that this city affords for the promotion of medical education, are to be restricted to that of raising practitioners for this country alone. We have the means, if we cultivate them as we ought, of edu-

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cating medical men not only to supply the wants of Ireland, but a great proportion of those destined for the army, navy, the colonies, and, I will say, for England itself; for even to England, I am persuaded, we shall be enabled to supply individuals *superior* in professional acquirements to those who in general fill the ranks of that most useful class of men, the surgeon-apothecaries, to whom, in a great measure, is consigned the chief medical, surgical, and pharmaceutical practice throughout the great, wealthy, and populous provincial towns of this part of the empire.

In making this assertion, I do not speak unadvisedly, and without consideration. The expense of attending an hospital in London (an attendance on provincial hospitals is not acknowledged by the London college) is, on the lowest average, probably three times greater than that demanded from a pupil for attendance upon the large institutions in this city. Edinburgh, though more œconomical than London, does not contain an hospital establishment or a

population sufficient for the purpose of extensive chirurgical or even medical education. The expenses attending anatomical pursuits in London and Edinburgh, from the difficulty of obtaining subjects, is at least six or eight, and not unfrequently, even ten times greater than in Dublin; often it amounts to an absolute prohibition. So that I feel warranted in my assertion, that the pupils educated in England and Scotland, from the great expense of acquiring anatomical information, are not in general sufficiently grounded in what may be considered the very foundation of medical and chirurgical knowledge; and without which the superstructure, however ornamental, must be frail and tottering. But the advantages of Dublin as a school, are already beginning to be known and felt in the sister kingdom. During the peninsular war, the superior anatomical and, of course, chirurgical knowledge of those army surgeons educated in Dublin, soon attracted the notice of the distinguished individual placed at the head of the army medical establishment; and with

a conscientious and honest discharge of the high trust reposed in him, he advanced those men in rank and responsibility, upon whose professional knowledge, when so much was at stake, most reliance could be placed, no matter what was their previous patronage, country, or religion. Those alone were selected who were most capable of affording the best chance of life or limb to the wounded soldier; and in consequence, numbers of our countrymen educated in this city, and filling subordinate situations in the army, were advanced with rapidity to posts of responsibility, rank, and emolument. This naturally opened the eyes of many to the superior advantages afforded by Dublin for the acquisition of surgical and anatomical knowledge; and we have had, consequently, since the war, a number of pupils from England and Scotland annually resorting to our schools; a number which I shall venture to predict will every year increase.

Unfortunately, our own foolish ordinations have interfered to mar the progress of Dublin as a school of anatomy and surgery. It is natural, and a matter of course, that pupils should wish to receive their diplomas of qualification from those constituted bodies under which they have been educated, and from the hands of those professors and seniors who have observed the progress that each has made in the acquisition of medical and surgical knowledge. This very natural and laudable desire is completely baffled by the charter of the college of surgeons in Ireland, which enacts that no person shall be admitted to an examination who has not served an apprenticeship to a regularly educated surgeon; and this is the only test of qualification demanded from the pupil by this corporation charter. No attendance upon lectures; no attendance upon hospitals; no dissections are required by the framers of this wise sample of legislation; and, in fact, at this very moment, in point of law, the president and examiners are bound to examine any man, no matter whether he has ever been inside the walls of an hospital or lecture room. If he has only

served an apprenticeship to what is designated a regularly educated surgeon, he may demand an examination.

But the framers of the charter forgot, in their wisdom, to define what are the qualifications which render a man a regularly educated surgeon. Their successors, I presume, taking it for granted that the only qualification to make a regularly educated surgeon, is an apprenticeship to one, demanded from every pupil who had not been an apprentice to a licentiate or member of the college of surgeons in Ireland, sufficient documentary evidence, that his master not only had been a regularly educated surgeon, but that he had also served his time to a regularly educated surgeon; and thus I have known the time of the court of examiners occupied, day after day, examining the genealogy of a candidate, even to his professional great great grandfather!

It is high time for these follies to cease. The spirit of information among the rising generation of surgeons would not brook 17 them a moment, were it not that their own interests are concerned in perpetuating a bondage under which they themselves have suffered.

To the credit of the leading men of the profession, an attempt was made within these two years to induce the college to petition parliament for a new charter, the basis of which was, to annul apprenticeships, and in lieu of them, to lay down a broad system of education in the various branches of medical studies; and that documentary evidence of attendance upon lectures, dissections, and hospitals, should be the only qualifications demanded from the candidate.

Will it be credited, that these projected improvements, which would *tend* to raise surgery from the state of a mechanical trade, to a level with the liberal professions, were rejected by a majority almost entirely composed of the younger members of the college; while at the same time, with scarcely an exception, these most de-

sirable improvements were supported by the senior members - men who were in the actual enjoyment of the advantages which the system of apprenticeship affords; while those who opposed the projected alteration in our charter, could only have held them in prospectu, and most of these unlikely, from the want of hospitals, ever to have enjoyed them. But, gentlemen, I trust that this degraded state of a liberal profession, requiring for its practice an expanded mind and extensive information, and allowed to be one of the most useful and honourable which falls to the lot of any body of men to exercise, cannot, whatever be the opposition excited by interested and mercenary motives, much longer continue to be debased to a level with the mere mechanical arts. I appeal to my young hearers, who in the course of a very few years will have a voice in the affairs of the college. Will they, from the sordid prospect of the chance of putting a few additional pounds in their pockets, perpetuate this degradation of themselves and their profession? Is there one of you,

with the liberal education you have received, that does not feel humbled by the necessity of submitting to the yoke of an apprenticeship, which is altogether useless to the master to whom you are indented (except so far as the fee is concerned), and to yourselves for the acquirement of professional knowledge?—would you not, if this base and unnecessary yoke were removed, walk more erect, and hold your heads more high among those juvenile friends who are pursuing their studies in the other liberal professions?

Notwithstanding the absurd method by which the college of surgeons in Ireland undertook to provide, through the arrangements of its charter, which was granted them in 1784, regularly educated surgeons for the community, the profession made rapid advances afterwards, partly owing to the institution of a school of anatomy and surgery, under the auspices of the college, where none before existed, and partly to the necessity imposed on every person intending to practise surgery to undergo the ordeal of a public examination. But a great deal must be attributed to the simultaneous effort which appeared at this time to take place all over Europe for the improvement of anatomy, physiology, and surgery, and to which Mr. Pott, Doctor Monro, senior, Haller, and the two Hunters so largely contributed.

Under these circumstances, the state of surgery could not but improve in this country. But this improvement cannot, with any reason, be attributed to the system of apprenticeship without other qualifications; and which manifestly prevents numbers from availing themselves of the advantages which Dublin affords as a school of medicine in all its branches. For it is a fact, that at least twenty-nine out of every thirty who receive their professional education in Dublin, are obliged, in consequence of the stipulation contained in this charter, to seek in another country the qualifications which entitle them to practise; a circumstance which tends to put money into the pockets of the examiners of other colleges, and to

impoverish still farther this impoverished land.

When we take a survey of the various public charitable institutions of this populous city, there is not one which can compete with the House of Industry and its extensive hospital establishment for the purposes of a medical school. This institution, although still called the House of Industry, has altogether changed its character from its original formation. It may now be considered a vast hospital for the admission of those who, from chronic disease and bodily infirmities, are incapable of obtaining a subsistence, and contains, exclusive of those in its hospitals, a population of 1508 persons. It has attached to it three distinct hospitals, a fever, a medical, and a surgical hospital. The hospitals combined contain at present 452 patients. There is also a dispensary attached to the institution for the poor of the north-west district of Dublin, at which the averaged number of patients prescribed for daily amount to one hundred and fifty.

The ruptured poor of the entire kingdom are supplied with trusses at this institution, and the averaged number supplied amounts to forty every month. Those seeking relief in any department of this extensive establishment require no other recommendation than the pressure of disease. The entire is supported by parliamentary grant, at about the averaged expence of 20,000l. per annum. As a government institution, it ought to have a school of medicine attached to it; even the despotic governments on the continent institute hospitals for the mere purpose of educating military surgeons. Surely, then, the paternal government of a free country must naturally be disposed to encourage the establishment of schools of medicine in all hospitals supported out of the public funds, in order not only that the army and navy, but the community at large should be benefited by them to the fullest extent.

This school is, however, undertaken altogether by those individuals now associated to teach anatomy and surgery within these walls, and I regret to observe, that their exertions met with most opposition where they ought to have received the greatest encouragement. Let me not be understood as alluding to the government, whose kindliest influence has long shone upon those institutions, but to certain clouds in our atmosphere drawn up by its rays, as if only to intercept them.

Lectures, in my opinion, to be useful, should, as far as possible, be demonstrative; if they are not so, the learner, in the quiet seclusion of his study, has a better chance to acquire the knowledge he seeks, in reading and pondering over good authors. Therefore, in our Surgical Lectures, it is our intention to illustrate the subject under consideration, by a reference to such cases as happen to be at the time in hospital, and to which the majority of our auditors will probably have access; and, when no living example of the disease in question is present, we shall endeavour to illustrate our observations either by drawings, casts, or morbid preparations.

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Extensive and momentous information in our profession is, no doubt, to be derived from books and lectures; but recollect that you do not see the diseases you are to treat in either, and that you only receive an account of them through the medium of others, who, at the same time that they give you the fruits of their experience, are liable to exaggerate, or misrepresent the symptoms they describe, so as to make them meet some preconceived notions or favourite hypothesis which had taken possession of the author's or lecturer's mind. For this reason, if there was no other, learn from your outset to observe in hospitals the characters and symptoms of diseases with your own senses, and do not give up the evidence of them contrary to your judgment to any man, no matter how high his authority or rank may be.

Hospitals not only afford an opportunity of acquiring pathological but physiological knowledge. Instance after instance occurs; and the process by which a wound or a bone unites, must make any reflecting mind anxious to learn the steps by which the living machine produces these results, and examine the wonderful complexity of the animal economy, and how admirably each organ is adapted to the performance of its peculiar functions.

The skeleton may be considered as the framework of this complex machine, in which we cannot too much admire the skill displayed in the structure, relative direction, and connection of the bones, so as to combine strength and firmness with an arrangement that permits the most complicated movements with little risk of displacement.

The astonishing powers of the muscles which move the bones next attract our admiration, which, although they are inserted almost every where in the most disadvantageous manner, produce the surprising effects we witness; but there is so much power to spare, that it is every where sacrificed to convenience of form and celerity. Thus the biceps muscle, as it is inserted in the human arm, acts like a man who endea-

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vours to raise a ladder on its nearest end, by applying his force to its lowest rundle.

As the motions of the body would be much impeded were the muscles every where inserted into bones, tendons have been constructed, which connect the muscles to the bones, and which may be considered as so many passive cords of great tenacity and strength; but, notwithstanding their strength, they very often give way to the power of the muscles; thus the strongest in the body, the Tendo Achilles, is frequently ruptured, and becomes an object of surgical interference. You have all heard of the celebrated French dancer, who ruptured both at the same moment in a violent exertion, and fell instantly powerless upon the stage. The four wild young horses are equally familiar to your recollection, which were affixed to the extremities of the unfortunate Damian, who was condemned to this unheard-of mode of execution for an attempt to assassinate Louis XV., which, although urged during fifty minutes to their utmost exertions,

could not tear asunder the limbs of this miserable being until assisted by the knives of the executioners. These striking, but oft-repeated instances, sufficiently evince the powers which the Creator has bestowed upon living animal matter. Now let us turn our thoughts a moment upon the medium by which the mind is enabled to act upon and command this powerful machinery.

The instruments by which the mind acts, are the brain and nerves. The different organs of the senses — those of sight, hearing, smell, taste, and touch connect us with the external world; and impressions made upon the peculiar nervous tissue of those organs are conveyed to the brain through the medium of the nerves, where they excite sensation and perception. A propensity or appetite may be excited, volition follows, and the command is conveyed along the nerves to the parts required to act. The subservience of the nervous chords to convey the dictates of the brain

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is proved by experiment, accident, and disease.

If the nerves going to certain muscles are divided or injured, the brain loses its influence over these muscles. If the brain be compressed, as occurs in violent injuries to the head, or in apoplexy, *it* loses its powers of affecting the voluntary muscles; while the involuntary, as we shall presently see, are independent of the will for the most obvious reasons, and continue to perform their functions long after all voluntary movements have ceased.

The involuntary muscles, such as the muscular coats of the stomach and intestines, and all the organs subservient to digestion, circulation, respiration, and the secretions, whose actions are necessarily incessant, and therefore ought to be independent of the will, are supplied by nerves which proceed from ganglions, or peculiar expansions of the nervous substance. These nerves, from their functions, are termed the nerves of organic or vegetative

life; and the honor of this discovery is usually ascribed to Bichat. There is, however, an exception to the rule that involuntary muscles are supplied exclusively by ganglionic nerves. The par vagum, a large portion of the eighth pair arising from the brain, is distributed to the stomach, a circumstance from which I should only be induced to infer, that it is like the diaphragm, which derives its nerves both from the spinal and ganglionic systems, a muscle of a mixed kind, being partly voluntary and partly involuntary in its actions. The voluntary action of the stomach is seldom seen in the human species; although many instances are detailed of individuals who possessed a power of regurgitating at will its contents; but such a power exists in the tribe of ruminating animals; and all the mammalia seem to be formed after a peculiar model, but this model modified according to the particular wants of the animal.

The influence of the mind over the stomach is apparent in all human beings,

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from the effects of mental impressions upon that organ. A man will sit down to his meal with an excellent appetite; an afflicting piece of news arrives, and his appetite immediately leaves him. The immortal Shakspeare, from whom no secret of human nature seems to have been concealed, has finely exemplified this in the conversation which occurs between Henry VIII. and Cardinal Wolsey, when the king communicates his determination to disgrace him, by putting his own intercepted dispatches into his hands, observing,

## " Read o'er this;

And, after, this: and then to breakfast with What appetite you have,"

The heart, whose movements are so independent of the will, has branches of nerves also from the eighth pair, which sufficiently accounts for the immediate influence of mental impressions on the actions of this organ. Instances are even related of individuals who could, at will, influence the actions of the heart, , That the ganglionic system of nerves is the seat of organic or vegetative life, we should infer from the rapidity with which the vital powers seem to sink, when those organs, on which the ganglionic nerves are distributed, are assailed by external violence, inflammation, or spasm.

A smart blow on the pit of the stomach, (which is also the situation of the centre of the ganglionic nerves, the cœliac ganglia, and plexus) will often produce death, as instant as if the person had been struck by lightning. It has fallen to my lot to have seen five or six cases of death from rupture of portions of the intestinal canal, and consequent effusion into the cavity, and in all of them, I was impressed by two circumstances; first, the rapidity with which the powers of life seemed to sink, long before inflammation had time to make any apparent advance; and, secondly, the little disturbance which the cerebral functions seemed to receive by a shock which took away the life of the individual in a few hours; for I have observed those persons

converse and reason with the same facility as when in the enjoyment of perfect health; and I have even heard one individual jest on some passing occurrence within a minute or two of his dissolution; a circumstance which proves how little the brain, and the system of nerves immediately arising from it, were affected by a cause capable of rapidly destroying life, and evinces the great difference between the ganglionic and cerebro-spinal systems of nerves. Until lately, it was supposed that the same nerves proceeding from the spinal marrow, performed the double office of sensation and motion; it has, however, been proved, by Mr. Charles Bell (a discovery which reflects upon him the highest honor), that the posterior fasciculi of nerves proceeding from the spinal marrow, are the nerves which afford the property of sensation to the parts on which they are distributed; and that the anterior fasciculi, on the contrary, give the faculty of motion. These facts are proved by experiments, which have been repeated with similar results by Majendie and others.

The nerves of the other senses, as well as that of touch, — those of sight, hearing, taste, and smell, — all have separate origins from different portions of the brain. Since then we find each portion of the nervous system has a distinct and appropriate function to perform, we are in some degree prepared for the proposition of Gall and Spurzheim, that the entire mass of the brain is not engaged in every mental operation, but that different portions of this viscus have their allotted functions.

To such of you as have a wish to be acquainted with the phrenological doctrines, I would strongly recommend you to read, at your leisure hours, the admirable work of Mr. George Combe, which has already gone through several editions. You will, after perusing this work, feel the littleness of those who scoff at a subject of which they are ignorant. An article, supposed to come from the pen of Mr. Jeffrey, appeared in the Edinburgh Review of October last, in which he attacks the system with all the weapons of an experienced

controvertist. This drew forth from Mr. Combe an immediate, spirited, and most triumphant reply, in which he not only answered all his adversary's objections, but convicted him of unfair dealing as a critic, - ignorance of the subject he undertook to criticise, -little depth as a metaphysician and but slight acquaintance with the opinions even of the school he supports. Phrenology, as defined by Mr. Combe, "is a system of philosophy of the human mind, adapted to explain the primitive powers of feeling which invite mankind to action, and the *capacities* of thinking that guide our actions till we attain the object of our desires."

Hitherto philosophers and metaphysicians have considered the mind as uninfluenced and unconnected with the body. They have treated "the thinking principle as a disembodied spirit." The phrenologist, on the contrary, "regards man as he exists in this sublunary world; and desires to investigate the laws which regulate the connections between the organs and the mind, but without attempting to discover the essence of either, or the manner in which they are united."

After the lapse and labour of more than two thousand years, metaphysicians are not yet agreed concerning the existence of many of the most important principles of action and intellectual powers of man. Instead of obtaining rules by which to discriminate the effects produced upon the character and conduct of individuals by different combinations of the mental powers, we find the works of philosophers on the mind, to be only a never-ending series of disputes whether such differences do exist in nature, or are the result of education and other adventitious circumstances. Gall and Spurzheim have ascertained from observation, primitive faculties of the mind so simple, as not to have been thought of by the philosophers of the old school; and they conceive, that they have also, from observation, ascertained the parts of the brain where each primitive faculty resides. It would lead me too far to enter deeper

into a consideration of this interesting subject. Suffice it to say, that it is a study closely connected with the various applications of medical knowledge, and, therefore, well worthy of the attention of the scientific practitioner. Their mode of dissecting the brain is, however, I am bold enough to say, the only one that ought to be pursued, and will be that adopted in this school. The old method we will of course shew you, as long as you are likely to be examined in it; although we might as well engage to dissect the muscles of an extremity by cutting them across, as to demonstrate the nervous fibres of the brain according to the old, and I am confident I shall soon have the opportunity of saying, obsolete method.

Many imagine that if a surgeon is acquainted with anatomy, and the treatment of fractures, dislocations, ulcers, tumours, and other affections of the surface of the body, that he is qualified to practise surgery. Nothing can be more fallacious than such an opinion; for even to be able to treat as he ought external affections, he should be well informed respecting the diseases of internal organs, and capable of ascertaining how far the external affection is connected with, or symptomatic of the internal disease. There is scarcely an eruption which occurs on the skin which is not, more or less, dependant upon internal derangement, chiefly of the chylopoetic viscera; and to be enabled to treat the former with any kind of success, our remedies must chiefly be applied to remove the derangement of the latter.

Suppose a question should arise respecting the propriety of amputating a cancerous breast, or removing an extremity on account of a diseased joint, no well-informed surgeon would venture on such an operation without an attentive consideration of the general state of the constitution, and of the internal organs, but of the lungs in particular. If he is so ignorant as to do so, he is unfit to practise our profession.

Compound fractures and severe injuries

are constantly followed by symptomatic fever, which may be attended with pain in the head or chest, delirium, or dyspnœa. All these symptoms surely require in the attendant a knowledge of the general treatment of fever.

If a surgeon is called upon to perform the operation of tracheotomy in a case of croup, before he assents to so decided a measure, is he not to inquire into the symptoms with which the patient is at the time affected? If he finds that such symptoms exist as point out the distention of the trachea and bronchial ramifications with coagulable lymph or frothy mucus, surely he ought not, at the dictum of another, to perform an operation which must be useless, and calculated only to bring disgrace upon himself and his branch of the profes-And to decide upon this and other sion. questions connected with the propriety of tracheotomy, it must be acknowledged, requires in the surgeon information respecting all the diseases to which the throat and chest are liable.

If a surgeon is called to a case of acute ophthalmia in a patient labouring under gout or rheumatism, if he has not these diseases in his mind, he may render very ineffectual aid to his patient under the ordinary methods of the treatment of simple ophthalmia. The inflammation of gout often attacks, in its most acute form, the conjunctiva of the eye; but on the recurrence of the inflammation to the foot from which it had receded, that of the eye as rapidly disappears. Here then, in the first instance, the business of the surgeon is, by hot fomentations and irritating applications, to bring back the inflammation to the foot, to exhibit colchicum, and those means most capable of removing, as rapidly as possible, a dangerous inflammation from a part essential to the future comforts of the patient, even though the means employed may not benefit the general disease. Then surely the surgeon, to be enabled to treat such a case, ought to have a knowledge of the nature and treatment of rheumatism and gout.

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But take the converse of the proposition. If a physician is ignorant of the sympathies and general disorder of the frame, which even a simple stricture of the urethra is capable of exciting, is he fit to practise his part of the profession? The shiverings, and the sympathetic derangement of the stomach and liver, and various indescribable ailments termed nervous, he would be incapable of tracing to their source; and therefore, by mistaking the cause, not only neglect the true mode of relief, but fill his patient's stomach with a farrago of drugs, which could not possibly do good, while the cause of these symptoms remained undiminished.

A gentleman called on me with enlargement of the testis, such as Mr. Ramsden terms Schlerocele, which I soon recognized as depending upon the irritation of stricture of the urethra. Instruments were used which removed the stricture and swelling of the testis, and at the same time, to the astonishment and delight of the patient, a train of dyspeptic and nervous complaints were cured, from which the patient had been teased for years, and for which he had been in the hands of more than one *pure* physician. — If a physician, when called upon to see a patient labouring under colick, or obstruction of the bowels, or the symptoms of abdominal inflammation, is ignorant that these symptoms may proceed from hernia, he loses his patient and his reputation together.

Long continued derangement of the stomach and bowels produce hæmorrhoids. Is the surgeon, to whom the treatment of this disease is usually consigned, only to treat the effect, and not to look to the cause ? If he does so, he is only half informed, and not likely either to benefit those who confide their health and life in his hands, or his own reputation. But it is unnecessary to multiply examples of this kind, which crowd themselves upon my recollection. Sufficient has been said to convince the most sceptical, that the division of the healing art into Physic and Surgery, which took place in rude and half-civilized times, can

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by no means afford an excuse to the man who may wish to confine his practice to the one for remaining in ignorance of the other. On the contrary, I should go so far as to say, that he who imagines himself, as it is termed, a pure surgeon, or a pure physician, and contemns as unnecessary, or perhaps degrading, the information of the sister branch, is UNWORTHY OF THE PUBLIC CONFIDENCE, even in that department which he has adopted as the peculiar field of his practice. Let me, however, not be misunderstood, or that I underrate the advantages that society derives from a division of labour. All I contend for is this — that the fundamental information, and the course of studies ought to be the same for both physician and surgeon. And that, after a person thus qualified has undergone an examination in Anatomy, Physiology, Chemistry, Materia Medica, and the principles and practice both of Physic and Surgery, that then, and not until then, SHOULD HE BE ALLOWED TO PRACTISE IN EITHER BRANCH. In large cities or communities, men will naturally fall into either one branch or the

other, according as either inclination, or the public voice, or chance, which, as often as selection, fixes our lots in this world, may determine.

But, in smaller communities and towns, the same individual must practise the healing art in both its branches; and if he is only acquainted with one, I leave it to yourselves to imagine the embarrassing difficulties which his ignorance must entail upon him, and the injury he may inflict on that portion of the community, in which he has allocated to himself so important a station.

As it happens, we should imagine, in opposition to the decrees of the VIRI GRAVES ET DOCTI at their "grave and solemn meetings," that the external surface of the body, allotted to the dominion of the surgeon, is supplied with branches of the same identical nerves, the same blood-vessels, and the same absorbents, that go to the more noble or important internal organs which fall into the physician's net, and that they are both governed by the same laws, and

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that there are actually no diseases that affect the one which do not influence the other. How, in the name of common sense, does it happen, that even this imaginary line of demarcation between Physic and Surgery was established by the wisdom of colleges and universities; so that the individual who is to practise one branch, may, if he can, be ignorant of the other; and that this line of demarcation is, in fact, in this very city, and at this improved period of science, if report be true, so far insisted upon, that a knowledge of surgery is even deemed a disqualification for the practice of physic. For on no other principle can I imagine a bye-law or regulation of the King and Queen's College of Physicians to be framed, (if it be possible such a bye-law can exist,) which will not admit to the test of an examination any individual who is a Licentiate or Member of the College of Surgeons in Ireland, until he has qualified himself (to use an Irishism) by a disqualification, i. e. by removing his name from the roll of the College of Surgeons.

Thank God, whatever follies exist in our own body, and I have freely exposed them to view, there are none commensurate with this. On the contrary, I am happy to perceive that almost all of our junior members and licentiates take degrees in medicine in those colleges, from which they are not excluded. Thus realizing what the interests of society demand, but which the littleness of chartered bodies have hitherto prevented, I shall say, in subversion of the very spirit of their charter; and I am persuaded, that the period cannot be far distant when the two branches of the healing art, which were dissevered in rude and ignorant times, will again be reunited, at least so far as that the fundamental education for both shall be the same.

Impressed with the absolute necessity of grounding the pupil in the principles as well of physic as surgery, the founders of this school have associated, with themselves, a professor of the theory and practice of medicine, and also a professor of chemistry and materia medica. The qua-

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lifications of Doctor Cuming and Mr. Donovan to fill the important offices they have undertaken, are already well known and duly appreciated by the public.

I have hitherto, gentlemen, engaged your attention, in a great measure, with observations on what may be termed the political economy of schools of physic, and particularly of those of our own country. A subject which many, perhaps, will esteem foreign to the observations which ought to be addressed to pupils about to enter upon the medical profession. But I considered, that details which unfold the state of that profession which you are going to adopt, the alterations which appear to me to be required in order to obtain that degree of perfection in the healing art of which it is susceptible, could not fail at present of exciting an interest in your minds, and perhaps hereafter of inducing those necessary improvements I have suggested.

I shall now, therefore, conclude this lecture with some brief observations appli-

cable to the best mode of acquiring the necessary degree of information in the various and laborious studies you will have to undergo before you are fitted for the ordeal of a public examination, or to practise your profession with a conscientious feeling, that you have not undertaken the performance of duties to which you are incompetent. Your first occupation will then be to acquire a knowledge of anatomy, which may be esteemed the very basis of medicine and surgery. Without a knowledge of anatomy, you will feel inadequate to treat the most common surgical case; and in the majority of instances in which a member of our profession has happened to disgrace himself, it may be traced to his ignorance of this foundation of his art.

Although books and lectures will assist, a true knowledge of anatomy is not to be acquired from either. You must patiently dissect from day to day, from month to month, and even from year to year the various parts of the human body. You must consider their texture, and above all, as a surgeon, their relative situations. Although all parts should be seen and known, some require more attention than others; for instance, the course of the large vessels and nerves along the neck and limbs, and their relative situation to the muscles, so as that the latter may serve as a guide to the surgeon when he may deem it expedient to cut down upon the former; — the viscera of the pelvis and their relative situation both in male and female; the important parts situated in the axilla, groin, bend of the arm, and behind the knee, cannot be too accurately or too often considered.

Among the parts of surgical anatomy which require the close attention of the practical surgeon, that of the joints is of the highest importance; and, strange to say, these are almost universally neglected by anatomical students, who, when they have dissected the muscles of a limb, throw away the bones and ligaments as useless.

It will not be sufficient to learn the

names of the processes of bones, and ligaments which connect one bone with another, the articular shape of their extremities, how they lock into each other, how they are supported by muscles as well as by ligaments in their situation, should be attentively considered. Upon a due knowledge of the joints often depends a surgeon's character. Nothing can be more injurious to a practitioner, than to let a dislocation escape his enquiries, which another from his superior knowledge of anatomy has been able to detect. But, gentlemen, you will have the advantage in this school of the friendly assistance of Mr. Adams and Doctor M'Dowell to direct and superintend your anatomical pursuits; and to their care I consign you. Do not waste your time at anatomical lectures by taking notes. Anatomy is more to be learned by the eye than by the understanding. I am not an advocate for notes at any lecture; while the student is marking down part of what has fallen from the professor, another part, and perhaps the more important, escapes his attention.

Besides, he misses the impression which the manner and expression of the lecturer is calculated to convey when any matter of importance is urged on the pupil's attention. When you return to your study, then note down the physiological or practical information which may be of importance to recollect; and this method of noting lectures is better calculated than any other to preserve the attention awake, and to comprehend the views of the lecturer.

It must be admitted, that physiology is but little cultivated in the medical schools of Dublin, yet it is this study which in a great measure rewards the pupil for the drudgery he undergoes in acquiring a knowledge of anatomy, and the arbitrary and often barbarous nomenclature connected with it. In the view of remedying this defect, as far as our school is concerned, we have instituted a distinct lectureship on physiology and comparative anatomy. My former pupil, Doctor M'Donnell, will attempt this arduous undertaking; for arduous I may well call it, when we consider the various sciences, the extensive information, and the talent for research which it requires. A consideration of the difficulties attending a course of physiological lectures claims therefore the indulgence of all parties for those omissions or deficiencies which must be expected to attend the first attempt of the kind that has been made in this city.

After the pupil has acquired a knowledge of the structure and functions of the body in a state of health, he is then naturally led to consider the alterations which it undergoes in both, when assailed by disease : and this constitutes the pathological part of the course. Much useful information may be conveyed by lectures on the practice of surgery and medicine ; but it is only in hospitals that practical information is to be obtained.

As in learning anatomy, the pupil must himself use the knife, and see and touch the various parts of the body in order to

learn their relative situations and structure ; so, in acquiring a knowledge of diseases, although books and lectures are useful, yet without seeing those diseases, and observing with your own eyes the symptoms and derangements they occasion (an advantage which hospital-practice alone extends to pupils), you will be ignorant of your profession; and here let me advise you, in the examination of patients, to observe the phenomena of diseases as presented to your senses, and do not trust altogether to the description of authors and lecturers. The expression of countenance, and general manner of a patient, even the mode in which he lies in his bed, communicate to the experienced practitioner information which no language, however accurate, could convey, but from which a practitioner is alone often enabled to prognosticate with certainty the termination of the This necessary information cannot case. be acquired by lectures, or from any other book but that of nature itself.

Most useful knowledge may, no doubt,

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be imbibed from an intercourse with experienced men; but experience often deceives itself, and errors have been handed down from one age to another, which could only have happened by suffering ourselves to be hoodwinked by the authority of the learned, and the dogmata of schools.

The book of nature, however, is uniform; and though difficult sometimes to comprehend, will deeply reward him who studies it with attention, with a mind free from prepossessions, and a sight unclouded by the mists of hypothetical errors.

Gentlemen, be assured we shall all feel a lively interest in the welfare of those who seem ardent in the pursuit of professional knowledge, and we shall be at all times ready to answer, to the best of our abilities, such questions as you shall ask of us, well recollecting the doubts and difficulties which embarrassed our own progress, and the advantage we should have derived from any friendly hand ready to remove some of the thorns, and brambles, and difficulties of all kinds which obstructed our path.

We would wish to impress upon your minds, that the profession which you are about to commence is one which demands from the starting-post, unremitting labour to acquire the necessary knowledge which will enable you to enter upon practice with a conscientious feeling that you are really qualified for the task. It may be years, perhaps, before you begin to reap any return for the expence and labour bestowed upon your education; let these years not be spent in vain regrets, that the world is unacquainted with your talents and acquirements, but in adding to your stock of knowledge, not only in professional information, but in those various branches of science immediately connected with your profession. Chemistry, mineralogy, botany, zoology, and comparative anatomy, may most usefully occupy your time. Our profession naturally leads, more than any other, to a consideration of the wonderful

works of nature, which has occasioned the remark of Johnson, that he knew no men in society so generally well informed as those of the medical profession. I say again, make good use of this period of leisure, for when professional business begins to flow in on you, you will find but little time for literary pursuits.

The commencement of practice is always to the young practitioner a state of anxiety, vexation, and disappointment. He begins the world tremblingly alive to the slightest event which may affect his professional character; and trifles, such as disappointment in the powers of a medicine, the peevish and unanswerable questions of patients and their friends, which, when he advances in practice, would only occasion a smile, give him now many a sleepless night. He observes, perhaps, a fellow-pupil, -known to have passed in idleness, revelry, and dissipation, those hours which he spent in assiduous labours by day at the dissecting . table, the hospital, or the lecture-room, and at night beside his solitary lamp, - ratheir are no saving hands numerous and strong enough to elevate him above the common mass of mankind, and he sinks to his natural level, never to rise again. Yes, gentlemen, this is no fiction, manufactured for your amusement. The history of protiossional mon in every realm, and at every period, attests the truth of the story. Let each of you recollect it when about to sacrifice your duties to your pleasures, and I

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