

The president's address, at the thirty-second annual meeting of the British Medical Association, held in Cambridge, August 1864 / by George E. Paget.

Contributors

Paget, George E. Sir, 1809-1892.
British Medical Association. Meeting 1864 : Cambridge, England)

Publication/Creation

London : printed by T. Richards, 1864.

Persistent URL

<https://wellcomecollection.org/works/vcvnbygr>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

With 8th Paget's Compl't.

18

THE
PRESIDENT'S ADDRESS,

AT
THE THIRTY-SECOND ANNUAL MEETING OF THE
BRITISH MEDICAL ASSOCIATION,

HELD
IN CAMBRIDGE, AUGUST 1864.

BY
GEORGE E. PAGET, M.D., F.R.C.P.,

MEMBER OF GENERAL MEDICAL COUNCIL;
MEMBER OF COUNCIL OF SENATE UNIV. CAMBRIDGE.

[From the British Medical Journal, August 6th.]

L O N D O N :
PRINTED BY
T. RICHARDS, 37, GT. QUEEN STREET.
1864.

THE request of friends, whose wishes I have good reason to respect, has induced me to print this Address in a separate form.

G. E. P.

ADDRESS TO THE BRITISH MEDICAL ASSOCIATION.

GENTLEMEN OF THE BRITISH MEDICAL ASSOCIATION,—
My first duty is to thank you, which I do most heartily, for the distinguished honour you have been pleased to confer upon me in electing me your President. My second duty, and my privilege, is to speak in the name of your associates here, and bid you welcome to Cambridge.

We are met within the precincts of an ancient and famous University; so ancient, that its origin is lost in the mists of ages, and one which claims as her sons not a few of those whom educated men have delighted to honour as their noblest representatives in literature and science.

You will excuse a Cambridge man if he feel some pride in welcoming you to the University of Spenser and Milton—of Wordsworth and Tennyson; in pointing out to you the spots where Jeremy Taylor and Isaac Barrow became so learned and so eloquent; where Bacon first perceived the right road to scien-

tific truth, and where Newton discovered the laws of gravitation ; where Ray saw, and made others see, the wisdom of God manifested in the works of the creation ; and where Harvey acquired at least that correctness in reasoning, which qualified him to interpret aright the facts of anatomy, and demonstrate the circulation of the blood. And, before such an audience, I am reminded that Caius and Glisson, Heberden and Wollaston, have a place among our Cambridge worthies ; and that, were I to speak of living physicians, I might mention other names as familiar in your ears and not less honoured.

Yet I must tell the plain truth, even though it may disparage in your esteem the University I love so well, and which, let me add, no man can fail to love and honour, who knows, as I know, its great and varied excellences.

In addressing this great Medical Association on its first visit to Cambridge, I cannot avoid—so, at least, I have been told—I cannot avoid speaking of the University in reference to medicine ; and, in so speaking, I must admit at once that its medical school is but a small one ; and, if it is to be assumed that the office of an university is to make physicians, and the reputation of an university is to be measured by the number it makes, I should have to confess that Cambridge has fallen short of its duty, and has no claim to a high reputation. But if the office of

an university be rather to educate men into the capacity for pursuing any profession; and, as regards its medical students, to train them in all that which “*quamvis non faciat medicum, aptiorem tamen medicinæ reddit*”, to take care that their medical knowledge be well founded, and that they do not obtain a medical degree until they have given the fullest proofs that their knowledge, wheresoever acquired, is real and at a high standard,—if these be the duties of the University of Cambridge, then I have no fear of criticism.

It is true, that the courses of medical lectures delivered here both have been and are less numerous and extended than those given elsewhere in the great schools of medicine; but it may be questioned how far this is a fault. Few persons doubt now, that in those great schools of medicine, where talent and industry and zeal have striven to give instruction in its utmost completeness, the students have been passing too much of their time in listening and too little in reflecting; that there has been too much teaching and too little time for study. The medical lectures delivered here have, at least, served well as an *introduction* to medicine; and the University has always encouraged its medical students to complete their professional education elsewhere, at the chief schools of medicine in large cities, where the extent of population and other circumstances afford

to the advanced student certain advantages for practical instruction beyond those possessed by Cambridge.

So much for the medical teaching. With regard to another academical function—that of granting medical degrees—I need not say much. The University has been always more solicitous about the character than the number of those on whom it confers its titles and privileges. The standard of requirements for its medical degrees has always been high: the period of study for the degree of M.D. was formerly ten years, and is now eight; all students are required to reside within the University for three academical years, during which they are subjected to discipline and moral training, and receive their *social* education; they have to devote a considerable part of this time to general studies, which have always been insisted on here, and are now everywhere acknowledged to be an essential preparation for that of medicine. The examinations have been efficient. The system of paper-examinations, which is now so generally adopted, had, I believe, its origin in Cambridge, and certainly was for years in use here for medical degrees, while elsewhere, in places which we should all name with respect, medical examinations were still conducted after the antique fashion—orally in Latin. The clinical examination, also—the most efficient test of practical knowledge—was first introduced here. I

have the satisfaction of remembering that it was introduced by myself three and twenty years ago, and it has never since been discontinued.

The granting licences to practise medicine involves a responsibility which can be measured only by human sufferings and human lives. The plain duty of the University is, to take care that its medical graduates are skilled in their profession ; and this first duty has not been neglected. But the University has aimed at something more than this. Its desire has been, and I trust ever will be, that its medical graduates should be men of liberal education in the best sense of the words ; that they should have a position in society fully equal to that of the other two learned professions ; that they should be qualified, as far as education can prepare them, for advancing those sciences which are to be the study of their lives. And Cambridge has recently shown its belief, in opposition to what has seemed generally accepted, that there is the same value in general scientific or learned training for surgery as for medicine ; the University now confers on surgery the distinction of an academical degree, and has fixed the requirements for its Mastership in that art almost exactly on a par with those for its Bachelorship in medicine.

So much for Cambridge in matters strictly medical : and I think it may be fairly held, that the

University has in these things not been negligent of its special duty. From this Association I believe that the University may fairly claim honour, for having done its share in upholding the dignity of the profession of medicine.

But the University has been charged with backwardness in other sciences in which we are interested—the sciences collateral to medicine—the group which makes up the subject of Natural History.

Now, if I were asked whether this charge be well-founded, I might answer, by pointing to the teachers and the taught; to Sedgwick, Miller, and Babington, to Berkeley, Darwin, Ansted, Jukes, and others. But I would not so evade the question. I would rather say, that Cambridge has not done enough in natural history. This is, indeed, what I have maintained and acted on within the University for many years on all suitable occasions. Nevertheless, as I cannot shut my eyes to the shortcomings in other places, I feel inclined, not indeed to exonerate my own Alma Mater, but to distribute the reproach impartially amongst *all* the defaulters. And, moreover, if Cambridge is to be blamed, it would be unjust not to discriminate between the general academical body and the individual colleges.

For it cannot be admitted, that the University as a body is indifferent to the natural history sciences.

Visit its museums, and judge for yourselves. You will see what the University possesses in Comparative Anatomy, and (in justice I must add) how much it owes to the zeal, the labours, and liberality of Professor Clark; you will see museums of geology and mineralogy, of which any university might be proud; you will, I regret to say, *not* see, or not see to advantage, the botanical and zoological collections (the former a *very* rich one), but you may see the buildings, recently erected at great cost, in which these and the other collections will ere long be better displayed and made more available for study. And when you have also taken a stroll in the Botanical Garden, you will, I think, admit that, altogether, you have seen substantial proofs that the University does take an interest in the natural history sciences.

Again, nearly all of these sciences have been long taught, and well taught, in this place; and willingly studied too. Three and thirty years ago, when I was attending the botanical lectures of the late Professor Henslow, his class numbered upwards of sixty, whose attendance was perfectly spontaneous. And who does not know our eloquent Professor of Geology? He has been lecturing here for nearly half a century, and the number of his hearers has generally been limited only by the size of his lecture-room, and that is not a small one.

Moreover, the University now invites the great mass of its students, *i. e.*, all who are candidates for the ordinary degree of B.A., to select for study some one of these sciences, as part of their academic course; and it has established the Natural Sciences *Tripes*, which is an *honour*-examination in the entire group of these sciences, and has been recently so improved and extended as to be now of equal scope with the examinations for mathematical and classical honours.

But, notwithstanding all this, the fact still remains, that Cambridge, so well known for classical scholarship and mathematics, and which supplies professors in these subjects to other universities, is but little thought of as a school of Natural History or Medicine.

What are the causes of this seeming anomaly?

Well, a glimpse of them may, I think, be seen in the *general* fact, that *no* university is, or ever was, equally distinguished in *all* branches of learning:—that one university is most famous for one kind of learning and another for another kind. Such was the case in olden times, and such is the case now. For a long period, the University of Paris was, on the whole, the most renowned University in Europe, yet its *medical* school was surpassed in turns by those of Salerno, Montpellier, Padua, and Leyden. And modern times present abundant instances of

like kind—instances of universities eminent for their schools of theology or law or medicine, or mathematical science or classical learning, but eminent in one or two only of these subjects, and inferior in the rest.

Indeed, a special eminence in one or two subjects is apt to become an actual *cause* of inferiority in the rest; for it quickly becomes absorbing and exclusive. It attracts to the University those who have shown in early life a natural aptitude for the special branch of study, and who seek the spot where their peculiar talents will be best cultivated and most appreciated and fostered; and in course of time these students add the lustre of their own reputation to that of their Alma Mater, and so enhance her special eminence; and some of them become her leading spirits, and their tastes and predilections influence academical opinion, and tend to exalt still higher the prestige of their own favourite science. And the influence of this prestige is felt by *all* the students; even those who have come to the University with a different purpose are liable to be diverted from it by the attractions of studies holding a higher place in academical estimation. The late Lord Langdale came to Cambridge as a student of medicine; he renounced physic for mathematics, and was rewarded with the highest honours of his year. Isaac Barrow came hither to study medicine. He exchanged it

for divinity, and became the greatest theologian of his time.

For a very long period the special eminence of Cambridge has been in the mathematical sciences and classical scholarship. These have been, and still are the favourite and favoured studies. And can we wonder it should be so in the school of Bentley and Porson; or can we blame a preference for mathematics in the University that has produced a Newton?

When we consider how unready both individuals and institutions commonly are to change the systems in which they have prospered and gained just renown, it seems less strange that Cambridge has done so little, than that she has done so much, towards admitting to terms of equality with mathematics and classics any sciences or studies whatever.

But the *prestige* of the favourite studies has been enhanced beyond measure, and is constantly maintained, by that which is not in the power of the *University* to alter; namely, by the exclusive encouragement they have received from the *Colleges*, which, in regard to the disposal of their own funds, are wholly independent of the general academical body. The numerous scholarships and fellowships which are in the gift of the several colleges are intrinsically very valuable, and have been awarded for a long series of years with the most scrupulous impartiality; so that they have become the crowning

honours of successful talent, and its highest incentives to industry and emulation. Now these rewards have been given by the colleges almost exclusively for proficiency in mathematics or classics. The natural result has been a virtual discouragement of other departments of science; for all students who are ambitious of distinction, or in need of emolument—all who have talents and desire to use them—have been stimulated to devote themselves to mathematics and classics, and seek the rewards of their labour in the only paths by which they could be reached. But brighter days are dawning: already in some of the colleges a proficiency in the natural history sciences has gained scholarships, and in a few cases helped candidates for fellowships; and there is good reason to hope that, before long, these sciences will receive from the colleges generally their due share of encouragement.

In fairly considering the whole matter, we must not forget that the *chief* function of the University of Cambridge and of its Colleges is *general* education, and that to fulfil this function they must choose for the principal subjects of study those which are best suited for developing and strengthening the more important faculties of the mind. Now it may well be maintained, and is implicitly believed here, that the study of mathematics and of language (as exemplified in the classical writers of Greece and

Rome) are, above all other studies, those which best fulfil the purpose of a liberal education. This is a question which might be discussed and debated at far greater length than would be agreeable either for you to hear or me to speak; but at least thus much is certain, that there are no faculties to be educated more important than reason and language; and that mathematics and classics have been recommended for this purpose by many of the most thoughtful and discerning men in all ages, including our own.¹

And it must not be overlooked, that mathematics, as studied at Cambridge, are not merely an exercise of rigorous reasoning, but include the whole range of physical sciences to which mathematical processes have been applied—all that is comprehended under mechanics, hydrostatics, optics, and astronomy, and which, by the way, cannot be thoroughly followed or understood without a knowledge of such processes. And that the mathematical training has not been barren of results, there are abundant living proofs—Herschell, Airy, and Whewell, Stokes and Adams, William Thomson of Glasgow, and a host of others.

In short, the mistake of the colleges has not been in their encouraging mathematics and classics, but

¹ See Dr. Whewell's able discussions on "A Liberal Education" and on "Cambridge Education."

in encouraging them too exclusively, and in not recognising the fact that natural history includes subjects of which no man pretending to culture should be wholly ignorant, and that it furnishes the best supplementary means of educating certain faculties—particularly those of observation—which are not adequately cultivated in the two more favoured studies.

I regret that a desire for precision in what relates to Cambridge has led me into wearisome details. But the *general* question, whether the study of natural science should become an established part of the education of the higher classes, is a subject of such interest as to need no apology for its introduction before any audience, and least of all before you. It is not only one of the great educational questions of the day, but a question, in the right solution of which no class is more interested than is our profession.

I confess that, to me, it seems high time to consider whether natural science might not be useful as part of a liberal education, when an author of great distinction and undoubted learning—one whose writings have been rewarded with the applause of the educated world and with some of the highest dignities in the gift of the Crown—states as a “well-attested fact, that a man’s body is lighter when he

is awake than sleeping; a fact" (he says) "which every nurse who has carried a child would be able to attest;" and concludes from these *well-attested facts* that "the human consciousness, as an inner centre, works as an opposing force to the attraction of the earth." I quote from a *seventh* edition, *revised*.

To my mind, the *necessity* for more general instruction in natural science needs no further proof, when ladies and gentlemen appear in a court of law to vouch their belief in the supernatural powers of a crystal globe; when those who are called highly educated throng the necromancer's consulting room to hear disembodied spirits rap on his table; when they daily become the dupes of barefaced quackeries; and, while avowing their belief in what is absurd or even impossible, plume themselves on their superiority to prejudice, regard themselves with complacency as walking in the spirit of the age—as being *au courant* with its progress—and class with the persecutors of Galileo any who question the accuracy of their facts or the logic of their conclusions.

Whatever may be thought of the enlightenment of the present age, there can be no doubt of the readiness and boldness with which it forms or avows its opinions. Far be it from me to question the birthright of an Englishman, to judge of all matters, whether he understands them or not. The

right of private judgment is the most precious of civil rights; but it *may* occasionally make fools of us, when exercised upon questions in which we are uninstructed. Even freedom of thought is not an unmixed good. It stirs a community in *all* directions—not always in the direction of progress. In the unwise and presumptuous it is often the parent of mischievous errors, that find ready acceptance among the ignorant and indolent, and cost for their removal much time and trouble of wiser men. It is easier to refute errors than to remove them. Ignorance must be instructed, self-sufficiency must become modest, before it can be convinced.

I have sometimes fancied that the rapid succession of brilliant discoveries and inventions which has characterised the present age, and should have enlightened it, has actually enhanced its credulity for the pretensions of quackery and imposture; that the unexpected and unimagined achievements of true science have so dazzled the minds of people, as to render them more accessible to other marvels, whether true or false, and more ready to yield unquestioning belief in *whatever* is new and wonderful: as, in times of old, the heroic deeds of a Hercules or King Arthur led their admiring countrymen to ascribe to them other achievements, not only unreal, but impossible.

Or as, in the sixteenth century, when men's minds had been roused and agitated by the spiritual preach-

ing of the Protestant Reformers, a readier credence was given, not to spiritual *truths* only, but also to spiritual and mystical *errors*. Then was the time, when enthusiasts abounded, whose imagination called up before their eyes every object they desired to see; then it was that astrology was the most widely spread and most generally studied as an useful science; then it was that demons were classified, and that witches were burnt in thousands. *Then*, even self-reliant intellects that had thrown off the yoke of ancient beliefs, yielded a ready credence to almost anything which had a spiritual semblance. Melanchthon was one of the chief defenders of astrology. Luther attributed diseases to the immediate agency of the devil, and was indignant with the physicians who referred them to natural causes. Paracelsus and Cardan, while shaking the popular faith in ancient physic, rested their own on cabalism and astrology.

In the old city of Aberdeen sorcery had lain undiscovered, though the holy clerks of King's College had been there for a hundred years, ready at any time to have exorcised it with bell, book, and candle; but in the fourth year after the founding of Marischal College and the spiritual teaching of its Protestant professors, twenty-four witches were burnt alive for dancing with the devil around the market cross.

As the minds of men in those days, when awakened to new and deep spiritual convictions, were opened also to mystical *errors*;—so in the present day, when startled with scientific wonders beyond their comprehension, do they gape at and swallow indiscriminately everything new that is presented to them under the outward guise of science:—and this, while they are disposed rather to scepticism than credulity in matters of ancient belief.

Truth, it has often been said, is stranger than fiction. They that use the proverb have, commonly, in view only the events of history or of social life. But it is equally true, if we compare the established facts of science with the pretended facts of fraud or quackery. If you tell an uninstructed person that you can talk easily and fluently with a friend a thousand miles off, can write to him at that distance in letter or in cypher, whichever he prefers, and that all the help you need is in some pieces of zinc and copper and some acid and a long piece of wire, and a thing somewhat like the face and hands of a clock: and then tell him, that by merely resting your fingers on a table, you can make it turn round and stand on one leg, and then move of itself about the room: both things may seem to him very strange, very wonder-moving; but surely the truth here must seem stranger than the fiction: to an uninstructed person table-turning must seem at least

as credible as electric telegraphy. Or, again, if you were to tell him that there are rays of light which give no light, that, when separated from other rays and admitted into a darkened room, they cannot be seen, they give no light, and the room remains dark as before; and yet that Professor Stokes has made them visible, has made these dark rays shine and give light in the room, merely by intercepting them with a solution of a salt of quinine contained in an ordinary glass:—and if, then, an advocate of homœopathy were to expound to the same hearer his views of the action of medicines:—surely the dogmas of Hahnemann (unproved and unsound as we know them to be) may seem to the uninstructed person no more strange or incredible than what you had told him about the rays of light, though the latter be well-assured facts, that can be verified at any moment, and are in harmony with the whole body of optical science.

It is plain that by no instinct, no common sense, no natural power, can any man discern between truth and untruth in these matters: to the uninstructed in sciences of observation the truth must seem stranger, less credible than the fiction. It is to this want of special scientific instruction that we must ascribe the popularity of error. For it must be admitted, that they who believe the fictions are not all, in a general sense, fools: there are among

them prudent statesmen, astute lawyers, faithful ministers, discreet housewives, such as in their several callings we might be content to take as our guides. And yet, because of their want of scientific training, their want of that knowledge which would tell them what it takes to establish a real fact in science, they are unable to distinguish truth from its counterfeit, or to gainsay the pretensions of quackery and imposture.

How, then, can people be guided to a better judgment in these things? Chiefly by being themselves in some measure instructed in some of the sciences of observation; and then by being taught that, in such things as I have put in contrast, the one set of statements are, and the other are not, founded on careful, repeated, various inquiries by men of special training; that the one set are, and the other set are not, provable by every test to the satisfaction of all who will look on and who are too acute to be deceived; and, finally, that the truths are, and the fictions are not, parts of a system or whole body of sciences.

It is this—the value and weight of a body of science—that uneducated people cannot understand. They may perhaps form some judgment whether the reasons advanced for any new view be in themselves good or bad, but they cannot estimate the kind or amount of evidence necessary to establish its truth;

nor can they appreciate the objections to it. They know not the multitude of well-assured facts which make up the body of true science, and each of which must be a standing argument against the admission of any new view that is at variance with them. To persons versed in science, this objection in its aggregate is well nigh conclusive. We may, in short, safely assert, that whatever cannot bear the test of other scientific inquiry, whatever cannot be incorporated with other knowledge, is probably not true.

These, unfortunately, are tests which they who are uninstructed in science cannot apply for themselves; and, as this class must always remain a large one, we may be sure that quackery and credulity, fraud and folly, will never cease while the world lasts. They are evils that can never be wholly removed.

Yet, assuredly, they may be mitigated. If some portion of the natural sciences, and in particular those which treat of the laws of life, should become an established part of the higher general education—of the education, not of medical students only, but of every English gentleman, we may expect that society will, in course of time, become more conversant with the kind of knowledge required for distinguishing between true science and its counterfeit. We may reasonably look forward to this improvement, if the universities of Oxford and Cambridge go onwards in the course they have

taken of late years, and do not rest until no one shall be called well educated who has not been trained in the knowledge of some natural science. I say expressly *some* natural science; for he that has studied even one, and has learned with what temper it must be pursued, with what labour it has been set up, with what evidence every new doctrine in it must be supported, and how that evidence must be able to bear a jealous cross-examination,—he, I say, that has learned this in any one natural science, will not lightly adopt spurious imitations of facts in any other.

And this wider diffusion of a knowledge of natural science—how much it would add to social and national happiness! Very few men pass through life without repeated occasions for the exercise of scientific knowledge in questions of their own or others' health, or property, or social relations; and according as a man guides himself, or submits to guidance, wisely or unwisely, so is the result for his life, his health, or a great portion of his happiness.

But if we would see to what a height of importance the correct appreciation of science may rise, let us look at its bearings on matters of vital interest to the whole nation. We have an instance in what Sidney Herbert accomplished for the health of the British army. Till 1857 the mortality in the infantry serving at home was nearly *double* that of the

civil population of the corresponding ages. *Now* it is actually *less* than in civil life. It is *less than half* of what it was. This represents the saving of the lives of British soldiers in time of peace. The contrast is even more striking in war, if we compare the mortality from sickness in the two wars in China—the one before, the other after the introduction of the new regulations;¹ and yet these were little more than well-known sanitary rules, applied intelligently by an able and earnest minister.

Then, if we turn from what has been done to what has *not* yet been done—to the report of the sanitary state of our army in India, to the facts which it discloses, and the sad reflections it suggests—we may see, in matters in which the highest political interests of the empire are concerned, how much *might have been* effected by men of station if they had been instructed in sanitary science, or had guided themselves by the advice of others who were.

But it is a *general* diffusion of such knowledge, or at least of respect for such knowledge, which is needed in a country like England; where the government is so much under the immediate influence of popular opinion, that scarcely a step can be taken for which the general public is not prepared. An autocrat, or his minister, if he be alive to the ad-

¹ See "Army Sanitary Administration and its Reform." By Florence Nightingale.

vances of science, may apply them at once to the exigencies of the state. But with us, there can be little progress without a progress of the whole nation.

After all, it is not to be maintained that the study of natural science has the peculiar merit of making men in all respects wiser, than the study of any physical science, or of literature, might make them. I fear it must be admitted that the body medical, instructed though all of us have been in natural science, has furnished its share of victims to the quackeries of religious profession, of politics, and of speculative finance. But this only strengthens the argument for the necessity of general education in natural science. Just as scientific men err, when they engage in matters that they have not studied; so do the unscientific, when they essay to judge in scientific questions, without even knowledge enough to choose their guides.

And if some acquaintance with the natural sciences be so needful for men in general, what should be expected of *us*, the medical profession, who practise daily an art which has its only sound basis in these very sciences.

I am well aware of the difficulty of maintaining a high standard of scientific acquirements for all, without exception, that seek to enter our profession; but surely this is what should be unceasingly aimed at.

Without scientific knowledge, the practice of medicine becomes mere empiricism ; without scientific and general acquirements, our profession may strive in vain to uphold its social status and its influence.

Every ignorant man admitted into our profession has an injurious influence on the estimation in which the entire body is held. His demerits have a tendency to lower us throughout the circle in which he is known. The want of confidence in him—the want of respect for him—beget distrust and disrespect for the profession in general.

Contrast with this, the influence on our social status of such men as Mead, Freind, and Arbuthnot, Thomas Young, Abercrombie, and Brodie, and of the many others, whose acquirements or achievements in literature or science have raised them to eminence in the eyes of the world. Have they not elevated in some degree the whole body medical ; nay, are there not some of our own associates, now living—are there not some here present—who have made us all their debtors by the lustre they have thus reflected on our common calling ?

And so, likewise, must our scientific character be the measure of our social *influence* ; and especially of our power of maintaining truth against error in questions that are daily exciting the attention of society, and of which we ought to be the accepted exponents.

When we consider that the sciences, with which we are, or ought to be, conversant, include subjects of which people in general are so ignorant, and in which nevertheless they take so lively and curious an interest, and which concern their well-being in almost all they do or suffer; surely it is in our power, as it certainly comes within our duty, to exercise a wide influence for good; surely it is our duty, and may be our privilege, to be in these matters the scientific "salt of the earth."

Our profession has never been backward in such work. The learned and ingenious author of *Inquiries into Vulgar Errors* was a provincial physician. It was a physician also who, in the sixteenth century, strove single-handed with the arms of reason against the barbarous hosts of witch-burners, and bore the glorious reproach of folly and presumption for putting the judgment of an insignificant physician in opposition to the dicta and decrees of emperors and kings, legislators and judges, divines and philosophers of all ages and all countries.¹ And something has been done in our own time—and well done—for the direct refutation of error. The most fashionable of modern quackeries has been ably and thoroughly exposed by Dr. Simpson.

Few have the ability for works of this kind; but

¹ See the curious conclusion of Bodin's "Refutation des Opinions de Jean Wier."

there are many of us, who might do *something* to prevent the spread of mischievous errors. We might do much, if we were to aid in such instruction as would be some *safeguard* against them. We know what was effected by the late Professor Henslow; how in a few years he brought about a complete revolution, intellectual as well as moral, in a grossly ignorant village community; how even such people as those were instructed in some knowledge of science, and filled with a rational and elevating respect for it. And really the means employed were little more than might be in the power of any medical practitioner who has his home in the country. It was not the depth of Professor Henslow's knowledge, but the simplicity with which he imparted it, that gave to it so powerful an influence. Our country members are quite capable of giving short, easy lectures, as Professor Henslow did, and many of them are capable of doing it well. I am not unaware of the objections that may be urged against medical men lecturing, and of the fatally easy transition from lectures for the benefit of others to lectures for the benefit of one's self; but I think such objections are not applicable to the case of a man instructing the poor of his own village, where he is officially charged with the care of them in sickness—in fact, though not in name, the true guardian of the poor,—and where some little instruction in such simple matters as the

air they breathe and the food they eat may save his poor neighbours from suffering or even death, and himself from some portion of his ill-requited labours.

I am disposed even to think, that our patients of the upper classes would have more confidence in orthodox medicine, if we were to vouchsafe more frequently to gratify their natural curiosity as to the nature of their diseases and the processes of cure. I am well aware of the opinion of shrewd "practical men", that no doctors acquire a reputation for skill, like those that hold their tongues; and, doubtless, silence is the most prudent for those, that aim to be counted wise, though they be not so; but I think, nevertheless, that an explanation of the case is as much due from the physician to his patient, as it is from the lawyer to his client; and that the confidence of the public in rational medicine would be strengthened by such explanations. I do not mean that the doctor should put on an air of profundity, and look, like Lord Thurlow, more wise than it is possible for any man to be; nor that he should impress on his patient that

"these are diseases he must know the whole on,
For he talks of the peritoneum and colon;"

but I mean that he should be willing to give a plain explanation in words as free as may be from technicalities.

We do injustice to medicine, if we treat it as a mystery. It is a science, and entitled to rank as such ; and we at least should be ready to show that its maxims are founded in truth and reason.

Let us hope that the educational changes now in progress will aid us in maintaining the dignity which is its due ;—that, when people are better instructed as to the sciences on which medicine rests, when they themselves have examined into some parts of its broad and firm foundations, they will have a juster appreciation of medicine itself. Let us hope, that medicine will then receive the respect that is due to it, as the only one of the learned professions which holds its doctrines open to all inquiries, and never condescends to uphold itself on any dogma either of authority or tradition. Let us hope—as we have a right to hope—that medicine will then be honoured as the profession in which all discoveries and inventions are offered freely for the benefit of mankind, and in which their concealment for selfish purposes, or their appropriation by patent right, is held to be disgraceful.

And till then, if the world deny to our profession the full honour which we feel and know is due to it, we may be well content with the ordinary round of duties, which are at once our lot and our privilege : we may be content with the internal satisfaction that our time is spent to the best of our ability in

doing good to our fellow-men ; that we do not rest supinely satisfied with what is imperfect in our science, but are ever earnestly and laboriously seeking for fresh light ; and when God vouchsafes it to our inquiries, we use it gladly in such works as he would have us do—in the relief of human sufferings, in healing the sick, in striving to make the lame walk and the blind see—in earnest endeavours to follow our Divine Exemplar, though it be with the limited powers and faltering steps of human infirmity.

doing good to our fellow-men; that we do not rest
 quietly satisfied with what is done for us in our
 science, but are ever earnestly and anxiously seek-
 ing for fresh light; and when God's voice comes to
 our inquiries, we are as glad to accept what he
 would have us do—in the realm of human knowledge
 in healing the sick, in striving to make the lame
 walk and the blind see—in our constant endeavor to
 follow our Divine Master, though it be with
 the limited power and limited steps of human
 humanity.