**The address delivered at the opening of the session, 1854-55, in the theatre of the medical school of Guy's Hospital / by John Birkett.**

# THE ADDRESS

DELIVERED AT THE

OPENING OF THE SESSION, 1854-55,

IN THE THEATRE OF THE

# MEDICAL SCHOOL OF GUY'S HOSPITAL.


## BY JOHN BIRKETT, F.R.C.S.,

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MEMBER OF THE HUNTERIAN, HARVEIAN, AND PATHOLOGICAL SOCIETIES;
SURGEON TO GUY'S HOSPITAL AND LECTURER ON SURGERY IN THE MEDICAL SCHOOL.


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"Homo, naturæ minister et interpres, tantum facit et intelligit, quantum, de naturæ ordine, re vel mente observaverit; nec amplius scit, aut potest."

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*By the same Author,*

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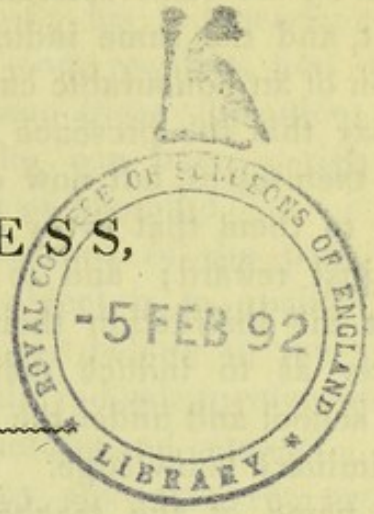
# ADDRESS,

*&c.*




MR. TREASURER,

An humble disciple and observer of the phenomena of nature, rather than one skilled in the art of composition or of oratory, I present myself before you, the victim of custom, to open the Medical Session of this Institution.

Gentlemen: just twenty-three years since, although it seems but yesterday, I heard for the first time an Introductory Address in this theatre. You may, then, easily imagine the difficulties which presented themselves to my mind when I had undertaken this duty, which I conceived devolved upon me as a teacher in this Medical School. These difficulties, which at first appeared great, became at last overwhelming when the recollection of the eloquent harangues of my colleagues upon the like occasion, and to which many of you have listened, flashed across my mind, and whilst striving to maintain the responsible position which I now occupy.

The duties which pertain to the offices I hold in this Hospital and School are of such a nature that I feel, knowing at the same time my incompetence to the task, that I should imperfectly fulfil them if I had refused to respond to the call upon this occasion.

With this feeling paramount in my mind, I asked myself, What are the objects of this annual address, of this assembly, of this gathering of the dispersed members of our profession? and I was at a loss to reply to the question, until I remembered that by far the majority was composed of young men studying, or about to study, the principles and the practical details of Medical Science: that another class consisted of those who, having imbibed the rudiments of their knowledge from those sources of information in which the youngest amongst us are now about to participate, appear here in association with us to-day, to cheer them in their first steps, and to demonstrate to them that success in their professional avocations is only to

be attained by the same determination of purpose, the same rectitude of conduct, and the same industry which they have evinced in the prosecution of an honourable career. To the younger of my listeners, I would say that the presence here to-day of many gentlemen, once young as themselves, but now occupying a high social position, is a guarantee to them that every exertion on their part will be sure to meet its just reward; and to us, as teachers, it is a satisfactory proof that the instruction their seniors received here was of such a character as to induce many of them to place their sons in the same school and under the same instructors whence they derived their preliminary knowledge.

In the name of the teachers of the Medical School of Guy's Hospital, I offer those gentlemen our acknowledgments, and assure them that the confidence thus reposed is as deeply appreciated by us as it is by them practically manifested.

The object, then, of this Address appears to be, to interest those of my auditory more especially who now for the first time, perhaps, occupy the benches of an anatomical theatre; to endeavour to incite them to pursue the right course; to encourage others to follow the path they have selected; and to deter a few from continuing in the error of their way; in order that all may attain an honourable and distinguished position in the profession they have selected to follow.

To impress strongly upon the mind of the medical student the exalted duty of his calling, and to lead his thoughts to the contemplation of the objects and the intellectual and moral influence of the study and practice of Medical Science, will then form the subject-matter of this Address; and although I know I am not competent to do it full justice, I rely upon your forbearance, your courtesy and kindness.

A young man having reached a certain age feels an impulse arise within him to prepare for the duties of the social position in which he finds himself placed. It may be his taste inclines in one direction, whilst necessity compels him to take the opposite course. He sees, however, at last the necessity of devoting himself to some occupation in order to provide for his daily wants.

"This is a high and important office; it deserves his utmost attention; it includes some of his most sacred duties, both to himself, his kindred and his country; and although, in performing this task, he is only influenced by a regard to his own interest or by his necessities, yet it is an employment which renders him

truly the benefactor of the community to which he belongs. All other pursuits must give way to this; his independence, without which he is not fit to be called a man, requires, first of all, that he should have insured for himself and those dependent upon him a comfortable subsistence, before he can have a right to taste any indulgence either of his senses or of his mind."

Your presence here to-day is evidence of the path you have selected to follow, and your next object is to qualify yourselves for those duties which more peculiarly belong to the practice of the medical profession; duties which, indeed, involve an immense amount of sacrifice of all personal comforts and interest.

Have the younger members of my auditory ever contemplated the responsibilities attached to the profession of medicine, the anxieties, the cares, and the best method of meeting them? Has the thought ever struck them, that upon their knowledge may depend the valuable life of the head of a large family, or that permanent deformity may result from their ignorance or neglect? If not, I would have them pause upon the threshold, and before they enter the temple of Medical Science, examine themselves, to see if they are prepared to devote all their energies, all their labour and all their strength to the acquisition of medical knowledge!

In the prosecution of your medical studies you are not left to your own choice; but, whether advantageously or not, you are compelled by the different examining bodies, before whom you will have hereafter to present yourselves, to pursue a particular line of study. This embraces a vast field of science, too extended, I fear, for any one to hope to arrive at an intimate acquaintance with many of the subjects. It may perhaps, then, serve as a useful guide to some, if I occupy a few moments by stating what appear to be the more important subjects, and those to which attention should be more especially devoted.

Now, as medical knowledge is devoted to the restoration of animal health, when impaired by disease or injury, it will be at once manifest that a study of the animal organization in a condition of health is essential to the comprehension of the changes which occur as the result of disease. A minute acquaintance, then, with the structure and arrangement of the various organs composing the body becomes of primary importance, or may go hand in hand with the study of the functions of the several organs. Anatomy and Physiology, including Chemistry, form then the basis upon which all medical

science ultimately rests. It seems scarcely necessary to urge this point, so self-evident does it appear, and perhaps it is more from thoughtlessness than from design that Anatomy is so little prosecuted by the majority of students. It is perfectly true that anatomical details may be acquired as an effort of memory; that page after page of an 'Anatomical Remembrancer,' may be repeated, or the substance of a lecture recapitulated, but this is not *available* Anatomy; this is not the intimate acquaintance with the construction of the body which the practitioner of medicine requires at the bed-side of the sick man, when he asks the explanation of the course of this or that pain, the restoration to the normal situation of a displaced bone. There is no subject in the whole range of medical science which demands your active attention at the present moment so much as Anatomy!

1. Because here you have facilities for the prosecution of this study, which perhaps will never again occur to you.

2. Because, at your age, the memory receives and retains impressions which produce the most lasting effects.

3. Because, when once thoroughly acquired, the knowledge is of daily utility; and if, after the lapse of time, the devotion of the thoughts to other subjects may even efface the more minute points, a very little industry suffices to restore that which was once so deeply impressed.

Lastly, because the study of this branch of science, requiring so much accuracy, consideration and personal observation, schools the mind, at its first outset, for the more successful pursuit of other subjects.

Anatomy, gentlemen, is essentially a science of facts—facts incontrovertible and incontestable—clearly and easily demonstrable by those who seek for them, and of such a nature as to lead the mind of him who contemplates them aright to the highest and most profound considerations that can occupy the mind of man!

The science of Physiology must become the study of your whole life: every practitioner of medicine is necessarily a physiologist—that is, one who reasons or discourses upon the phenomena of nature. And, since this science embraces a range so wide, your attention must be early devoted to it, and no opportunity should be neglected of acquiring a method of prosecuting physiological inquiries. Indeed, to acquire the method of prosecuting all inquiries into natural science should be one grand object of your early studies.

"Science," writes Sir J. Herschel, "is the knowledge of many,

orderly and methodically digested and arranged, so as to become attainable by one. The knowledge of reasons and their conclusions constitute *abstract;* that of causes and their effects, and of the laws of nature, Natural Science."

It is with the last, then, that you, gentlemen, as students of medicine, have most especially to concern yourselves; and the preliminary education which you have enjoyed in the several branches of abstract science have rendered you more fitted to prosecute such investigations.

"The ultimate source of our knowledge of Nature and its laws is *experience;* by which is meant, not the experience of one man only, or of one generation, but the accumulated experience of all mankind in all ages, registered in books or recorded by tradition.

"But experience may be acquired in two ways: either, first, by noticing facts as they occur, without any attempt to influence the frequency of their occurrence, or to vary the circumstances under which they occur; this is *observation:* or, secondly, by putting in action causes and agents over which we have control, and purposely varying their combinations, and noticing what effects take place; this is *experiment.*

"To these two sources we must look as the fountains of all natural science.

"Experience once recognised as the fountain of all our knowledge of Nature, it follows that, in the study of Nature and its laws, we ought at once to make up our minds to dismiss as idle prejudices, or at least suspend as premature, any preconceived notions of what might or what ought to be the order of Nature in any proposed case, and content ourselves with observing, as a plain matter of fact, what *is.* To experience we refer, as the only ground of all physical inquiry.

"But, before experience itself can be used with advantage, there is one preliminary step to make which depends wholly on ourselves: it is the absolute dismissal and clearing the mind of all prejudice, from whatever source arising, and the determination to stand and fall by the result of a direct appeal to facts in the first instance, and of strict logical deduction from them afterwards. Now, it is necessary to distinguish between two kinds of prejudices, which exercise very different dominion over the mind, and, moreover, differ extremely in the difficulty of dispossessing them, and the process to be gone through for that purpose. These are—

1. Prejudices of opinion.
2. Prejudices of sense.

"By the first, we mean opinions hastily taken up, either from the assertion of others, from our own superficial views, or from vulgar observation, and which, from being constantly admitted without dispute, have obtained the stronghold of habit upon our minds.

"To combat and destroy such prejudices we may proceed in two ways, either by demonstrating the falsehood of the facts alleged in their support, or by showing how the appearances which seem to countenance them are more satisfactorily accounted for without their admission.

"But it is unfortunately the nature of prejudices of opinion to adhere, in a certain degree, to every mind, and to some with pertinacious obstinacy, *pigris radicibus*, after all ground for their reasonable entertainment is destroyed. Against such a disposition the student of natural science must contend with all his power: not that we are so unreasonable as to demand of him an instant and peremptory dismission of all his former opinions and judgments; all we require is, that he will hold them without bigotry, retain till he shall see reason to question them, and be ready to resign them when fairly proved untenable, and to doubt them when the weight of probability is shown to be against them. If he refuse this, he is incapable of Science!

"As regards the second, it is not the direct evidence of our senses that we are in any case called upon to reject, but only the erroneous judgments we unconsciously form from them, and this only when they can be shown to be so *by counter-evidence of the same sort;* when one sense is brought to testify against another, for instance; or, the same sense against itself, and the obvious conclusions in the two cases disagree, so as to compel us to acknowledge that one or other must be wrong."

Having acquired a certain proficiency in anatomical and physiological science, you will next proceed to the investigation of the instances of disease you find within the wards of the Hospital; and, to the effects which follow, the employment of remedial agents in modifying, arresting or controlling its influence upon the body. The opportunities which you now enjoy consist in the assemblage within one building of about five hundred patients: they are daily visited by the physicians and surgeons, who are always ready and anxious to afford every information to the inquirer. In the prosecution of this branch of your studies, the habit of careful, minute, methodical observation must be acquired and continually maintained. To observe the mode in which some students pass from bed to bed would lead to the

conclusion that by the sense of sight alone the science of medicine is to be cultivated; but be assured, gentlemen, that the appeal for assistance must be made to every one of the senses we enjoy, for they are all required in the successful pursuit of this science.

So many of the natural sciences have of late lent their aid towards the diagnostication of disease, that you have now to accustom the ear, first, to the healthy sounds of the heart and lungs preparatory to distinguishing those sounds which are the result of morbid action. A mere glance at the excreta is not now sufficient to content the accurate observer; but, by the aid of optical instruments, the eye is enabled to detect forms, otherwise invisible, and from the existence of which the diligent investigator of Nature's actions interprets important facts.

Gentlemen, the system of Clinical Instruction carried out at this Hospital is, I believe, as widely extended as its first importance demands. It can scarcely be said that there is any limit to the opportunities afforded for the most minute examination of the cases of disease; the only limit, indeed, being that to go beyond which might be detrimental to the suffering patient.

After you have shown, by the regularity of your attendance at the lectures, your desire to learn; and after having, it is to be presumed, made such advance in your studies that you are prepared to investigate the action of disease itself by your own original research, you are permitted to record the cases, under the observation and with the assistance of the medical officers—a privilege, in most cases, rightly appreciated, and one which, I believe I may say justly, is that to which too great importance cannot be attached. All that you are now learning will become of essential importance and utility to you in after-life: it is an opportunity of acquiring just that practical knowledge which you will most require; and, I have no hesitation in adding, that all those gentlemen who have left this Hospital, the best informed and the most competent to practise, have been those who spent the largest proportion of their time in the acquisition of medical knowledge at the bed-side.

"You must not, however, gentlemen, forget that the investigation of morbid action is to be prosecuted in a place to which we have not yet introduced you. We have only, as yet, spoken of disease as witnessed during life, but, when the vital flame is extinguished, there is a moment in which the effects of disease upon the animal organs may be examined with the most valuable results. Gentlemen, if it be necessary to urge any of you to prosecute this study with diligence

and activity, I might perhaps induce you to do so by pointing out the distinguished professional and social position occupied by some of those who have most diligently cultivated Pathological Anatomy. I would mention the names of Sir A. Cooper, Dr. Bright, and Dr. Addison, of our own school, those of Sir B. Brodie and Mr. Paget, and there are many others to whom medical science is indebted for original research and important discoveries.

But there is yet another office in the wards, to fulfil the duties of which requires considerable professional knowledge, and its responsibilities are such as to demand of those gentlemen who accept it their most strenuous exertions and endeavours to carry out, not only the surgical treatment of the cases entrusted to their immediate supervision, but the benevolent intentions of the founder of this noble Institution. I allude to that of "Dresser," an old, time-honoured term, one nearly expunged from hospital vocabulary, the more important and euphonious word of "House Surgeon" having assumed its place. Gentlemen, I reverence the old title; my happiest associations are blended with the recollections of those agreeable hours, when, in company with many of those I am glad to see here to encourage me this day, we occupied the old, half-furnished rooms, where we discussed the varied treatment of the cases by our different masters, and impatiently awaited the summons of the accident-bell. You, gentlemen, who will occupy the new rooms have, in comparison, a palace to dwell in; the luxurious sofas and chairs invite you to rest your wearied limbs after the toil and labour of going round the wards; and in your separate rooms you have the opportunity of pursuing your surgical studies.

By thus alluding to the office of "Dresser," I would not have you suppose for a moment that the knowledge to be acquired in that capacity exceeds that which is to be gained by fulfilling the duties of "Ward-clerk," under the immediate supervision of the physicians. In the former capacity you enjoy the opportunity of practically assisting the surgeon in the treatment of the cases under his care, and, by this means, acquire that readiness and dexterity in manipulation which will enable you to carry out the more mechanical parts of surgical practice. In the latter, however, you are pursuing a course of study, the knowledge derived from which is applicable in the treatment of all disease, and the importance of which may be made manifest to you by stating that by far the majority of cases you will be called upon hereafter to treat belong much more to medical than to surgical practice. In point of fact, all the knowledge you acquire from the physician is available and indispensable when you have to

treat a surgical case; for, strictly speaking, perhaps, chirurgical science relates almost exclusively to the manual treatment of injuries from external causes and their results.

I hope it will be the ambition of the majority of my listeners to occupy these honourable offices; because, as they are now all open to competition, and each student has the same opportunity of obtaining them as another, the holding them is, to a certain extent, an evidence of their industry, their general good conduct and proficiency.

There are, gentlemen, I believe, few subjects so conducive to the pleasure and happiness of life as the study of Nature and her laws, and this I have already said is the constant pursuit of the practitioner of medicine.

Here, then, we may be placed in a somewhat dangerous position, a danger, indeed, "pertaining alike to every profession, every branch of study, every kind of distinct pursuit. I mean the danger in each, to him who is devoted to it, of over-rating its importance as compared with others, and again of unduly extending its province. To a man who has no enlarged views, no general cultivation of mind, and no familiar intercourse with the enlightened and the worthy of other classes besides his own, the result must be more or less of the several forms of *narrow-mindedness.* To apply to all questions, on all subjects, the same principles and rules of judging that are suitable to the particular questions and subjects about which *he* is especially conversant—to bring in those subjects and questions on all occasions, suitable or unsuitable—like the painter Horace alludes to, who introduced a cypress-tree into the picture of a shipwreck; to regard his own particular pursuit as the one important and absorbing interest; to look on all other events, transactions and occurrences chiefly as they minister more or less to that; to view the present state and past history of the world chiefly in reference to that; and to feel a clannish attachment to the members of the particular profession or class he belongs to, *as* a *body* or class (an attachment, by-the-bye, which is often limited to the collective *class,* and not accompanied with kindly feelings towards the individual members of it), and to have more or less an alienation of feeling from those of other classes; all these, and many other such, are symptoms of narrow-mindedness which is to be found alike, *mutatis mutandis,* in all who do not carefully guard themselves against it, whatever may be the profession or department of study of each.

"Against this kind of danger the best preservative, next to that of

being thoroughly aware of it, will be found in *varied* reading and *varied* society; in habitual intercourse with men, whether living or dead—whether personally or in their works—of different professions and walks of life, and, I may add, of different countries and different ages from our own."

Bishop Coppleston writes, "In the cultivation of literature is found that common link which, among the higher and middling departments of life, unites the jarring sects and subdivisions in one interest; which supplies common topics and kindly common feelings, unmixed with those narrow prejudices with which all professions are more or less infected. The knowledge, too, which is thus acquired expands and enlarges the mind, excites its faculties, and calls those limbs and muscles into freer exercise, which, by too constant use in one direction, not only acquire an illiberal air, but are apt also to lose somewhat of their native play and energy. And thus, without directly qualifying a man for any of the employments of life, it enriches and ennobles all; without teaching him the peculiar benefits of any one office or calling, it enables him to act his part in each of them with better grace and more elevated carriage; and, if happily planned and constructed, is a main ingredient in that complete and generous education which fits a man to perform justly, skilfully and magnanimously, all the offices, both private and public, of peace and war."

It has been already observed that "Science is the knowledge of many, orderly and methodically digested and arranged so as to become attainable by one;" and doubtless many of you will be anxious to add to the stores already accumulated. Indeed, this would almost appear to be a *duty* which the members of a liberal profession owe to each other.

Before you do this, however, the habit of prosecuting inquiries of this nature must be diligently enforced. In the observation of facts, and in collecting instances, much caution and care is demanded. It is necessary that you should follow some regular system, and, especially in the record of the natural history of diseases, you must collect the facts of every case according to a definite arrangement, if the cases are to be finally compared one with another, in order to arrive at the due appreciation of one fact over another, or to pursue a process of generalisation.

I would, however, here remark, that the statistical knowledge derived from a comparison of a large number of cases is important in adding to our knowledge of the natural history of any class of disease,

rather than as affording any accurate guide in the medical treatment of any individual case. In the treatment of each individual case, the facts of that case singly and alone should be first clearly sought for and established, and then the science which has been acquired by experience, in the treatment of many cases possessing like general characters, becomes available in the practical treatment of the case immediately under observation. Blindly and without due regard to the peculiarities of each case, to follow out any particular line of medical treatment, in certain classes of cases having near affinities to each other, because a certain number of cases have recovered under the adoption of one mode of treatment, is to pursue a line of practice closely bordering on the worst form of empiricism, and one which cannot be supported by any rule of scientific inquiry.

On the other hand, it must be admitted that all our knowledge of the natural history of diseases has been acquired by, and the advance of all medical science must always keep pace with, the accumulation of facts relating thereto.

In truth, we are all engaged in a physiological study, and physiology is only to be pursued by the accurate record of the phenomena occurring in nature. To observe with industry and attention, to record with fidelity and accuracy, to arrange with order and methodically, and to be guided in your generalisations by facts alone, are the rules which must direct you in the investigation of the phenomena of disease which may fall under your observation.

Truth, gentlemen, is the gem you seek, and, like all other inestimable possessions, it is only to be discovered by perseverance, grasped by industry, and held with devotion!

There seems scarcely to be any study so likely to improve the moral feelings as that of Medical Science. It is as much an inciter to the highest moral sentiments as it is at the same time a sustainer of them.

"And, if there be any other commandment, it is briefly comprehended in this saying, Thou shalt love thy neighbour as thyself." The practical evidence of this love is daily afforded by the generous sympathy with which the profession at large devotes itself to the relief of suffering humanity. Even the constant intercourse with pain and misery, instead of dulling our sympathies, only serves to excite to fresh exertions to render that torture more endurable and that misery less appalling. To me it seems that we should be proud, indeed, of being members of a profession, the chief incitement to activity and energy in which is the pleasure afforded by relieving the

necessities of our fellow-creatures, for under innumerable circumstances there can be no sordid feelings goading to the action.

The wide range of scientific inquiry involved in the study of medicine enables the student to indulge in those delightful recreations which result from the contemplation of Nature and its works.

"To the natural philosopher there is no natural object unimportant or trifling. From the least of Nature's work he may learn the greatest lessons.

"And this is, in fact, one of the great sources of delight which the study of natural science imparts to its votaries. A mind which has once imbibed a taste for scientific inquiry, and has learned the habit of applying its principles readily to the cases which occur, has within itself an inexhaustible source of pure and exciting contemplations: one would think that Shakspeare had such a mind in view when he describes a contemplative man as finding

> 'Tongues in trees—books in the running brooks—
> Sermons in stones—and good in every thing.'

Accustomed to trace the operation of general causes and the exemplification of general laws, in circumstances where the uninformed and uninquiring eye perceives neither novelty nor beauty, he walks in the midst of wonders: every object which falls in his way elucidates some principle, affords some instruction, and impresses him with a sense of harmony and order. Nor is it a mere passive pleasure which is thus communicated: a thousand questions are continually arising in his mind, a thousand subjects of inquiry presenting themselves, which keep his faculties in constant exercise and his thoughts perpetually on the wing, so that lassitude is excluded from his life, and that craving after artificial excitement and dissipation of mind which leads so many into frivolous, unworthy and destructive pursuits, is altogether eradicated from his bosom."

Gentlemen, many of you are here, in London, for the first time, and perhaps also this is the first occasion in which you have been left entirely alone and uncontrolled to seek amusements and companions. The influence of the study of the science to which you have devoted your lives will, in all probability, guide many of you to select, as amusements, one or other of the sister sciences, or branches of natural history, the arts or literature; and some resource of this kind is absolutely necessary to revive the drooping spirits after fatiguing exertion in medical practice.

Whatever your amusements may be, however, never forget that you are members of a body in which the ill-conduct of one has, more or less, an influence with the public in the estimation of the whole class; and that it is much more difficult to eradicate an evil habit when once firmly established than to withstand temptation, when prepared to meet it, and to be proof against the seductive allurements of folly and vice.

As regards the selection of companions, this is a matter in which great circumspection is required; for my experience has led me to observe, that by far the majority of those young men who have diverged from the right path have been led away and entrapped by an artful and designing companion, rather than by any innate instigation to folly on their own part. If you at once determine to take Science as your lamp, to be guided by the light which she will afford, you need not fear the dark and treacherous path along which vice would conduct you, nor the call of him who would allure you from her fair companionship; but you may be induced hereafter to exclaim: "In my youth and through the prime of manhood, I never entered London without feelings of pleasure and hope. It was to me as the grand theatre of intellectual activity, the field of every species of enterprise and exertion, the metropolis of the world of business, thought and action. There I was sure to find the friends and companions of my youth, to hear the voice of encouragement and praise. There society of the most refined kind offered daily its banquets to the mind, with such variety that satiety had no place in them, and new objects of interest and ambition were constantly exciting attention either in politics, literature, or science!"

THE END.

Edward Newman, Printer, 9, Devonshire Street, Bishopsgate.