

PRELIMINARY ESSAY

ON

THE STUDY OF PHYSIC.

WHATEVER may be the accidental irregularities inseparable from the operation of moral causes, it must necessarily be assumed as a general truth, without which all earthly motives for exertion would be annihilated, that every man's chance of success in his profession will be in some measure proportionate to his merits and his talents. In what degree fortuitous circumstances may be capable of influencing the regularity of the connexion, or the accuracy of the proportion, it is unnecessary and impossible to determine with certainty; but we may safely venture to assume, as an axiom, which it would be a mischievous folly to deny, that in the lottery of physic, as in all other lotteries, the chance of a man who holds ten tickets must be decidedly better than that of one who is possessed but of five; nor would the truth of this axiom be invalidated by a thousand instances of a supe-

riority of success accidentally united with inferiority of pretensions. However inadequate the possession of superior talents alone may be to insure the confidence of the public, it must be a mistaken opinion, although it has been asserted by persons of no ordinary observation, that a man of great abilities is morally incapable of being a good physician; and that even the most acute powers of mind would, in the practice of physic, become so effectually blunted by constant intercourse with nurses and invalids, as to lose all their original advantages. Dr. Radcliffe, who might have been esteemed a competent judge, told Dr. Mead, as a great secret, that the true way to succeed in physic was to use every body ill: but Dr. Mead used nobody ill, and succeeded better than Dr. Radcliffe. It is well to be familiarised to such paradoxes as these, in order to be prepared for the lesser contradictions and mortifications which will sometimes occur to the most fortunate practitioners. In fact there is no study more difficult than that of physic: it exceeds, as a science, the comprehension of the human mind: and those who blunder onwards, without attempting to understand what they see, are often very nearly on a level with those, who depend too much on imperfect generalisations, applied to facts, which can scarcely be subjected to any well marked analogy. Hence it may happen, that talents and labour may become useless for want of a proper direction: although, if they had been confined to the simple track of patient and detached observation, which alone is within the scope of the more humble

practitioner, they must at least have ascertained each fact with more care and greater precision than the mere empiric, and in all probability must have made some combinations of experience, which would have been beneficial to mankind and honourable to themselves. To assist in furnishing the student with a sufficient direction, for cultivating any particular department of his profession, in the most advantageous manner, is the principal object of this work.

Although it has been very justly observed, that no man has ever been truly great, without possessing a certain degree of enthusiasm, which has carried him beyond the direct and immediate pursuit of the ultimate object of his labours; it is still necessary to avoid with caution the common error of mistaking the means for the end, and directing too great a portion of the attention to the introductory departments of literature or of science. A person determined to obtain every accomplishment, which can be pointed out as subservient to the medical profession, and resolving to study every book which has been recommended with this view, might take up the select catalogue of medical works, published by Dr. Rothe, who professes to mention no book which he does not consider as good and useful; and, beginning with languages, might spend the first ten years of his studies without getting much further than the "Chinese," and twenty more before he came to those of the "Bohemians," and "gipsies"; to say nothing of the "logical, metaphysical, moral, political,

statistical, technological, agricultural, mathematical, geographical, chronological, genealogical, heraldic, diplomatic, numismatic, and historical" works which are to follow, before he enters on chemistry and anatomy.

There is indeed a perpetual and interminable contention between the advocates of the grand principle of the division of labour, which facilitates every operation by allowing its continual repetition, and the admirers of the more comprehensive grasp of a powerful mind, which can embrace the relations of all the various parts of the whole subject, and can illustrate and improve the science, by a comparison of its different departments, and by the new lights which they throw on each other: and the question extends to all other professions, and to the general education which is necessary to those who engage in them. Its solution must however depend, in great measure, on the nature of the acquirement which is proposed to be obtained. A mathematician may arrive at the highest possible degree of eminence in the different modes of calculation, without requiring any assistance from an accurate knowledge of different languages; a linguist may be completely master of all subjects of grammar and criticism, without the slightest acquaintance with geometry: and there are other branches of study, so confined within themselves, and so capable of accurate deduction and precise definition, as to be completely independent of all others, and to require the exercise of clear apprehension and

correct memory only for their pursuit. Other departments however defy all attempts to subject them to any didactic method, and require the exercise of a peculiar address, a judgment, or a taste, which can only be formed by indirect means: a composer of music, for example, would make himself ridiculous, if he attempted to put in practice the visionary proposition of Kircher, who states it as a problem, to be solved like those of the elements of Euclid, "the nature of an affection or passion of the mind being given, it is required to delineate it correctly in a musical composition." And it appears that physic is one of those departments, in which there is frequent necessity for the exercise of an incommunicable faculty of judgment, and a sagacity, which may be called transcendental, as extending beyond the simple combination of all that can be taught by precept. Nor is there any other mode of cultivating these powers, than by pursuing a much more extensive range of elementary study, than appears, to a common and superficial observer, to be in any way connected with the immediate objects of the profession. As a further illustration of these observations, I shall here translate the first chapter of the elegant little essay of Professor Vogel on the study of physic, which contains some remarks that claim the most serious attention from every judicious student.

" 1. Perhaps there is no science, which requires so penetrating an intellect, so much talent and genius, so much force

of mind, so much acuteness and memory, as the science of medicine. For the full attainment of its proper and ultimate object, it requires also indispensably the possession of stability of judgment, rapidity of decision, and immoveable firmness and presence of mind; readiness of recollection, coolness, flexibility of temper, elegance and obsequiousness of manners, and a profound knowledge of mankind, and of the secret recesses of the human heart.

“ 2. Learning alone, and knowledge, however extensively accumulated, of medicine and of other subjects connected with it, are not sufficient for forming a great physician: the high character of a perfect master of the art must be the result of a combination of a multiplicity of qualifications, which must partly be natural, and partly acquired and improved by laborious cultivation. However rare such a perfect union may be, no person should dare to enter the temple of Hygiea, who is not distinguished by very evident marks of a capability of acquiring it, and who is not possessed of that genius, without which all possible knowledge is insufficient to make a genuine and complete physician. “ A man can “ be neither a philosopher nor a physician,” says Hertz, “ by “ imitation or by rules, but by native genius alone.” The inestimable advantage of a naturally acute judgment and delicate discrimination is no where more striking, as Freind has remarked, than in the profession of physic. . . . ”

“ 3. Of all this the most convincing proofs will immediately occur to us. Medicine not only comprehends so very extensive a range of knowledge, but its truths are often so profound and so much concealed from a cursory inspection, so intricate, so much disguised, distorted and obscured by a multitude of delicate and invisible causes, that nothing less than the all commanding eye of the most enlightened understanding, than the all penetrating and all searching power of genius, can possibly recognise that which is hidden in darkness, can follow that which is remote into the last traces that it imprints, can distinguish certainty from opinion and probability, can separate the essential from the accidental, and finally can analyse and develop every subject of investigation so completely, as to leave no further doubt respecting any of its properties, which are cognisable by human means.

“ 4. Nor does any art, except that of war, require so much intrepidity, courage, and promptness in judging and in acting, as the art of physic. How often does the life of a patient depend on the decision of a moment! This precious moment, the timid physician, who is discomposed, and stupefied, and confused, by the unexpected appearance of danger, by unforeseen circumstances of doubtful import, and accidental occurrences of various kinds, or by the behaviour and personal character of the patient, suffers to pass away wholly or partially unemployed; since in this frame of mind,

he is incapable of seeing, judging, and acting correctly; and his impaired powers of reason can find no fixed point, on which they may rest, so as to act with their due effect.

“ 5. It becomes also on many accounts absolutely necessary, that he should lay a restraint on his passions, his inclinations and his feelings, which are so often and so variously excited; and that he should support with patience the most disagreeable sensations, whenever the good of the patient requires it; that he should completely forget himself, when the situation and circumstances of the patient call for sacrifices, which are of importance for his tranquillity and his recovery; and that even the most untoward and disgusting conduct of the patient, whatever difficulties, and contradictions, and impediments may occur, should not prevent his applying the whole force of his intellect, and the entire powers of his invention, to the investigation and consideration of all the symptoms of the disease, and to the conducting and combining the means of recovery, in the best possible manner, with the cool wisdom of a mind perfectly at its ease.

“ 6. There is scarcely any literary profession which requires the manners and behaviour to be so decorous, so polished, so obsequious, so courteous, so gentle, so obliging, so cautious, and yet so manly and in every respect dignified, as must be expected of a physician. His mind must therefore be highly cultivated by a good education, and by knowledge

of mankind and of the world. Without this knowledge, he will be subject to err at every step that he takes, and will be in perpetual danger of injuring and disgracing the profession which he follows. Without this, he will every where find impediments insuperable to all his learning: all his information will be useless, obscured, disputed, or misunderstood, if he raises prejudices and excites disgust, by an unfriendly, obstinate, inflexible, ungraceful, inconsiderate, stiff, coarse, or bashful behaviour: and his embarrassment will perpetually disturb the free operation of his faculties, and impede the application of his knowledge. It is the physician's duty, to take every man, who entrusts himself to his care, as he is, with all his failings, and to treat him in such a manner, as to obtain his confidence, and to fulfil his wishes. Men of all classes and ranks in life, of all dispositions, capacities, characters, and opinions; in every imaginable situation, of every age, constitution, and temper, have equal claims to his assistance and his attention. He must know how to give every one his due; and wherever his profession calls him, how to adapt his conduct to the circumstances in which he finds himself. The wisdom, the selfdenial, the grace, the dignity, the decency, the noble frankness and openness of heart, the accommodating disposition and agreeable manners, which are required of him, can only be obtained by means of a good education, united with opportunities of becoming acquainted with the world, and habits of intercourse with society. It is extremely to be lamented, that

young men of the best families, who must be supposed to have the advantage of the most refined education, seldom devote themselves to the study of physic. To this remark, Great Britain affords some exceptions; but, as far as I know, they are scarcely to be found in any other country.

“ 7. Those persons therefore must never expect to acquire what is absolutely necessary for the practice of physic, much less to distinguish themselves by superior excellence, who are as deficient in the qualities of the mind which have been mentioned, as in moral cultivation and polished education, and who consequently have not learned, and have not been accustomed, to accommodate themselves to the world and to individuals, to subdue their passions when it is required of them, to bear the burdens of their employment without repining, and to think and to act uninfluenced by conceit, by caprice, and by senseless prejudices. Such persons as these, if, in spite of their deficiencies, they will still persist in the pursuit of physic, can only become, for want of talent, shortsighted, stupid, spiritless, superficial, useless and dangerous practitioners; and for want of good sense, and cultivation, affected, stiff, rough, quarrelsome, vainglorious, empty, presumptuous, proud and mean members of society; who can at best succeed with the lowest ranks of the populace only; who will necessarily expose to ridicule themselves and their profession, and who must perpetually shock the feelings of every refined and well educated man. It cannot

be expected that all the most desirable qualities should be found at once in perfection in the character of every young physician. By habit, and by daily occurrences, which call forth its powers, the mind must gradually assume the wished for stamp. But without all previous disposition, and without all preparation, such an object is absolutely unattainable.

“ 8. Since the practice of physic is unavoidably connected with so many circumstances which must greatly agitate a weak, delicate, and sensitive frame of body, and make the individual incapable of properly fulfilling all his duties, it becomes also highly desirable that those, who devote themselves to this profession, should possess a strong constitution, and an uninterrupted state of good health; and that those, who are obliged to make great sacrifices for the preservation of their own health, should choose for themselves some other employment, rather than the care of the health of others. It is especially necessary that the organs of sense and respiration should be in their utmost perfection; and every physician should take the greatest possible care to preserve and to strengthen them: the nerves should be firm and strong; not insensible, but not capable of being thrown into tumultuous agitation upon every slight irritation, and thus so liable to interrupt perpetually the cheerfulness of mind which is so highly desirable and so absolutely necessary to the physician. Disturbances by night, fatiguing journeys,

infectious diseases, numerous anxieties, and exhausting exertions, together with the sudden alterations of temperature which are frequently unavoidable, certainly require the possession of a strong constitution, and a state of health capable of opposing a firm resistance to all causes of disease.

“ 9. Finally, the study of physic requires also a certain degree of affluence, since on account of the high price of books, apparatus and instruments, of the fees of various kinds required in the pursuit of instruction, and the expense of travelling in foreign countries, which is so necessary to a physician, it cannot be undertaken without the possession of ample funds. Nor can a young practitioner, who has just finished his studies, expect, for a considerable time, to derive so much emolument from his profession, as to enable him to live without assistance from his private fortune. It is therefore idle to attempt to facilitate the study of medicine to those who are in extremely narrow circumstances. In France the most indigent often devote themselves to physic: hence arises in that country the abundance of medical men, void of all education, who do so little honour to their profession. For a similar reason it is rather to be deprecated than desired, that the expense of living at a university should be extremely lowered, especially if it is at the same time the native place of the student; and I fully agree with Tissot, that if it were practicable to prevent it, no person ought to be

allowed to study physic in his native city. At the same time it cannot be denied that these general remarks may require particular exceptions, where distinguished genius, or other favourable circumstances, entitle an individual to be exempted from their operation."

Such being the general outline of the character which the medical student must hold up to himself as the object of his pursuit, it remains to suggest some hints respecting the steps, by which he is the most likely to succeed in its attainment. The appropriation of the earliest period of life belongs rather to the subject of general than professional education: but it is not so much a matter of indifference as is sometimes supposed, at what age the work of literary instruction is to commence. In my opinion, the earlier the rudiments of learning are acquired the better: there is no danger that a child's health should suffer from moderate application at any age. The study of languages, or rather of the authors who are universally read in the usual modes of learning languages, appears to be, for many reasons, the best employment for the years of childhood, together with the exercise of the memory in learning by heart and rehearsing, especially poetry: and such pursuits may be continued with advantage, whether at home, or at a private or public school, with the addition of arithmetical and mathematical learning, until the time of going to a university, which, if a boy has been diligent, need not be later than sixteen. At nineteen or twenty then, we may sup-

pose the study of physic to commence, and that five or six years are to be allotted to its completion; the previous time having been spent in acquiring a sufficient proficiency in the Latin, Greek, French, Italian, and German languages, in mathematics and natural philosophy, and perhaps the elements of botany and chemistry, besides drawing and some other similar accomplishments. There will be time enough after this for physic; and if the student has been placed at a university where no physic at all is to be learned, he will have no occasion to complain that his time has been mispent. Indeed a metropolis must possess advantages for the study of physic, and disadvantages for many other studies: hence it seems a natural consequence that a university ought not to be the principal school of physic in any country. The example of Edinburgh must be allowed to prove that such a combination is not altogether impracticable: but it will not readily be granted by the inhabitants of South Britain, that we do not possess in our universities a greater fund of abstract science, and in our metropolis more favourable opportunities for the acquisition of medical knowledge, than is any where to be found in Scotland, or perhaps in the rest of Europe.

Probably however the first year of medical study cannot be better spent than in an attendance of the lectures which are delivered in Edinburgh: they are in general more elementary there than elsewhere; and a person, wholly unacquainted with

the subject, will find no difficulty in readily comprehending them. It is true that, on account of the excellence of the clinical and practical lectures, it has been more usual to visit Edinburgh at a period later than even the second year; but to me the acknowledged superiority of these lectures did not appear a compensation for the loss of time in attending others, which could only be repetitions of what had before occurred in the two first years spent in London. The choice of lectures must naturally depend on the previous acquirements and abilities of the student: but there is no danger of his attending too many in the beginning: since he will at first have little occasion to read, or to employ any more of his time with reference to his pursuits; and he need not be afraid of filling up as many of his hours with lectures, as his powers of attention enable him to undertake.

The practice of taking notes from lectures is of clear and decided utility: and every student ought to make it a point to keep correct and complete notes of one course of lectures, on each department of medical science. But it will seldom be advisable to take notes of a first course, where two of the same kind are to be attended; in order that the mind may, in the first instance, be wholly devoted to following and comprehending the lecturer. The use of short hand I consider as every way to be reprobated: it converts the writer into a mere machine: it employs him in copying words, instead of digesting and compressing thoughts; and unless he has two

or three more hours to bestow on the same subject after the lecture, which very few lectures are worth, his manuscript remains in a form almost as inconvenient for reference, as if it were written in an unknown language. I have never yet heard a lecture, which I found it difficult to follow, as minutely as I desired, by notes written in a common legible hand, moderately abbreviated: and having so written them, I have generally thought them more useful to myself, than a perfect transcript of the words of the professor. In a foreign country, the habit of taking notes becomes an excellent study, for the attainment of a facility of writing the language: at first one feels the necessity of taking notes in one's own language, for want of a readiness in the foreign idiom; but by degrees one acquires a facility of writing in that of the lecturer. Not that I should much recommend the attendance of medical lectures in any other country, in preference to the variety which may be found in our own. The modest Dr. Rothe indeed asserts, that "the Germans have left all other nations far behind them in almost every department of physic:" but Professor Vogel thinks otherwise, and I cannot forbear to introduce here a second extract from the work which I have already quoted.

"The concise, energetic, and philosophical language of the English becomes every day more and more indispensable to the physician: he must not therefore omit to study it with particular attention. The greatest masters of the art have

lived and still live in England, and have usually written, and continue to write, in their own language.—There are also among the English as well as the French authors not immediately medical, a great number that may be read, with equal pleasure and advantage, by a physician who is desirous of forming and refining his taste, of elevating his mind above what is common place and insipid, and of enriching and embellishing it with food of the noblest nature. The works of British genius especially are so full of great and lofty, and heart elevating, and acute and subtile thoughts and representations, founded on the most profound knowledge of man and of the world, that scarcely any other language is capable of affording the student so rich a harvest of valuable productions, and of bestowing on the mind so much force, life, and penetration." P. 25.

But whatever may be the merit of the German physic, it exists as a written system, and may be learned from books exactly as it is delivered from the professorial chairs. In practical anatomy the great cities of the continent have some advantages even over London: but these advantages are of such a nature, as to affect the purse of the student more materially than the progress of his studies. At the same time it cannot be questioned that the hospitals of Paris, and especially of Vienna, may afford, at a proper period, much that is highly worthy of a young physician's observation.

After a first winter spent in Edinburgh, and a summer employed in botany, chemistry, and other preliminary studies, with the interposition of such occasional relaxation as the necessary travelling may easily be made to afford, the next winter ought to be devoted to practical anatomy in London: and this study, together with that of physiology, will occupy very properly the student's whole time. As the spring advances, he must become a pupil of an hospital, which must continue to be his principal and daily object at every subsequent period, while practical lectures on physic, surgery, midwifery, and the materia medica, should be attended with diligence, whatever branch of the profession he has chosen for his particular occupation: for however necessary it may be to separate the different departments of practice, no part of the elementary or preliminary studies should be wholly neglected by a student of any description. A physician ought not to hold himself excused from patient and minute dissection, nor should a surgeon be satisfied without a competent knowledge of the learned languages. Mr. Parkinson would have even apothecaries educated at a university: but it is too probable that they might, under such circumstances, form habits and connexions less calculated to make them pursue their appropriate employments with diligence, than if they adhered more closely to the established modes of education.

If it were necessary to assign the age at which each of the studies which have been mentioned ought in general to com-

mence, we might prescribe for the preliminary education a form somewhat resembling this.

At 2, 3, or 4, Reading and reciting English.

6 Latin. Writing.

8 Arithmetic.

10 Greek.

12 French.

14 Italian. Geometry.

16 German. Mathematics.

17 Natural Philosophy. Drawing.

18 Chemistry. Botany.

The studies more strictly medical will be distributed nearly in this manner.

First year Anatomy. Theory of Medicine. (Clinical Lectures.) Continuation of Chemistry and Botany. Mineralogy.

Second Practical Anatomy. Physiology. Hospital. Practice of Physic.

Third Comparative Anatomy. Surgery. Midwifery. Materia Medica. Clinical Lectures.

If lectures were perfectly composed and delivered, and perfectly remembered, they would supersede the necessity of books of any kind: and on the other hand, a well selected course of reading would be very little inferior to oral instruction, except with regard to the inspection of preparations, and the practice of dissection and operations. But in

a pursuit so extensive as that of medicine, it is necessary to employ each of these modes of study with almost as much diligence as if we depended entirely on it for information ; and it becomes desirable, that a course of reading should be pointed out, which may either be adopted collaterally with the attendance of lectures, or subsequently to it, or in both ways. Thus it will be highly proper to read some elementary chemical work, before any chemical lectures are attended ; and during dissection, some of the best books of anatomy should be employed, for comparing the descriptions with the actual appearances : and a similar mode should be adopted with respect to other departments.

The principal course of practical reading will however more properly follow the completion of the established plan of elementary study ; beginning with any department which may be chosen for an academical discussion or dissertation : and after graduation, in the many years which must elapse without much active employment, continuing the pursuit, by comparing the notes of lectures with the best authors in each department, and reducing the memorandums which have been made in reading, into a uniform system with those notes.

Nor will there, in all probability, be any want of time for so extensive an undertaking : a sensible writer on medical education asserts, that he has literally " known a physician above

fifty years of age objected to for his youth." In provincial situations, the want of competition will frequently lead to a much earlier practice; but in a metropolis, it is indispensably necessary, that a physician should be prepared, whatever his abilities may be, to pass at least ten years after his first establishment without the slightest emolument from his profession; and he may think himself singularly fortunate if, at the expiration of this period, he is enabled to derive a competent subsistence from it. In the mean time he must have sufficient resolution to resist the many allurements which will present themselves, to divert him from the exclusive pursuit of the profession which he has chosen, unless he should find them so powerful, as to induce him in any degree to sacrifice his views in physic to other considerations. The public is inclined to think, and not without something like reason, that the abilities of different individuals are pretty nearly equal; and that if any one has acquired distinguished excellence in a particular department of study, he must have bestowed so much the less time and attention on other departments: of course if he excelled in more than one line out of his profession, the natural inference would be so much the stronger: and whether this may be fair or not, it is at least fair that direct evidence should be produced or imagined, of a devotion to medical pursuits, before medical confidence can reasonably be expected.

Hence it becomes obviously desirable to a young physician

to obtain some public appointment, which may ensure him a certain degree of practice, and which may proclaim to the world that he cannot be wholly inexperienced. An army physician has often a considerable advantage, in acquiring both experience and emolument, at a time when he might otherwise be unemployed: but his experience is sometimes less appreciated in civil life, and in a different climate, than he has naturally been induced to expect it should be. The appointment of a physician to an hospital has so generally been considered as a very eligible introduction to practice, that it is scarcely necessary to mention it, except with a view to express a caution against overrating its advantages. A physician of the highest eminence has been heard to declare, that he could never trace a single patient to his immediate connexion with a well known hospital, which subsisted for many years; and to give it as his opinion, that little less was to be learned by a diligent attendance of an hospital as a pupil, than by being employed as physician to it. It appears to me that the most material benefit to be derived from such an appointment, with regard to the extension of private practice, depends on the notoriety, that the physician must be unavoidably in the habit of prescribing continually, for a multiplicity of patients, in all manner of diseases: but it is certain that many have possessed this advantage for a number of years, without obtaining that benefit in any material degree. At the same time few, if any, have ever risen to eminence without it, unless they had some other very ostensible

means of forming and supporting a general connexion in a medical capacity.

Mr. Edgeworth, in his *Essays on professional education*, is very much disposed to deny the precarious tenure of medical fame, and, in opposition to the opinion of one of the best judges of life and of morals that the last century produced, very strenuously asserts, that "all the world is competent to decide on this one simple, essential point, whether a physician's patients die or recover under his care." But in the first place, it is obviously impossible, that the public should obtain any extensive or accurate knowledge whatever of the history or event of any great variety of cases, that occur even to a physician already eminent: and in the second place, if such a detail were before the public, it would often surpass the utmost sagacity of the best informed medical men themselves to determine, how far the event of each case was unavoidable, and how far it depended on the treatment.

This uncertainty may be illustrated by the example of the very candid Dr. Brown, who has lately examined, with great apparent accuracy, the records of a public institution, conducted by men of the highest celebrity in their profession, and has thought himself under the disagreeable necessity of inferring from them, that the course of fever is nearly, if not fully, as tedious and as severe, when treated by the best esta-

blished remedies, as when wholly left to nature. Happily however for the credit of physic, this conclusion appears, upon proper consideration and calculation, to be completely unwarranted by the registers from which he has deduced it. In fact the results of about 300 cases of fever, admitted into the infirmary in question, may be very simply stated in this manner. The mean duration of the whole disease was 12 days : the mean time of admission was between the 6th and 7th day ; but the mean duration of those cases, which were admitted at the commencement of the disease, was somewhat less than 9 days. Hence it may be inferred, not only that the duration was shortened at least 3 days by the early employment of medical agents ; but also that this difference was the effect of a difference of only $3\frac{1}{2}$ days in the time of the whole treatment ; since the remedies were employed for 9 days in the one instance, and for $5\frac{1}{2}$ in the other : consequently, that if these $5\frac{1}{2}$ days had been suffered to elapse without medical treatment, the whole period of the disease would have been lengthened 4 or 5 days by the omission, at least if we adopt the simplest supposition respecting the proportion of the cause and effect ; and that the natural duration of the disease, thus determined, would have been about 16 days, instead of 12 : so that the means employed must be allowed to have a claim to the merit of reducing the duration of the fever from about 16 days to 9 ; without taking into account the different proportion of fatal cases, which is not the immediate object of our author's investigation.

I have thought it necessary to enter into this examination of the facts advanced by Dr. Brown, which have hitherto been generally considered as authorising the inferences that he has drawn from them, because the discussion appeared to be essential to the conclusion of an essay like the present: since if it were true that the medical science of the most celebrated professors could effect so little, under circumstances so favourable, as he has supposed, the public would have scarcely any motive left for encouraging a pursuit so fruitless, nor an individual for devoting himself with zeal and enthusiasm to the attainment of knowledge, where nothing further than doubt and difficulty could reasonably be anticipated. It is our duty not to depreciate the advantages of which we are actually in possession; and while we use our utmost exertions for the improvement of our profession, and for the interests of humanity, we must not omit to assign their proper value to the few steps, which the labours of ages have in reality enabled us to advance, with security and with confidence. At the same time it is obvious that the necessity of such a discussion is sufficient to prove the fallacy of the argument, deduced by Mr. Edgeworth from the supposed facility of judging by the event, and to show how incumbent it is on every medical man, to be able to console himself, in the consciousness of his own rectitude, under the misconstructions and disappointments, to which he will unavoidably be liable, even without any very obvious want of candour on the part of his patients or of the public.