Individualism : an introductory address delivered before the Medical Society of King's College, London, on the 16th of October, 1873 / by John Curnow.

INDIVIDUALISM:

An Introductory Address

DELIVERED BEFORE THE

MEDICAL SOCIETY OF KING'S COLLEGE, LONDON,

On the 16*th of October*, 1873.

BY

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'The first motive which ought to impel us to study is the desire to augment the excellence of our nature, and to render an intelligent being yet more intelligent.'—*Montesquieu.*

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INDIVIDUALISM.

Mr. President and Gentlemen,

I feel under a twofold disadvantage in having to read to you this year's introductory address. In the first place, I have been privileged to hear a larger number of these addresses than any other acting member of our Society. Of these, some dealt so exhaustively with the great medical or intellectual questions of the day, whilst others treated so fully the history and objects of our Society, or were so replete with the special mental characteristics of their authors, that the remembrance of what I had heard almost deterred me from undertaking a similar task. Secondly, even while writing this, I was occupied with the anxieties attendant on the preparation of another introductory address, and the arrangement of the lectures for my first anatomical course. However, I determined not to fail in my duty as your senior Vice-President, knowing that under such circumstances I could depend on your favourable consideration.

I purpose to consider briefly one of the prominent features of our present age in its bearing on our general and technical education, and its more remote effect on

our Society. For running counter to some ideas and theories at present widely prevalent, and for rebelling against some eminent orthodox opinions, I feel justified by the fable —

> 'The Mountain and the Squirrel
> Had a quarrel;
> And the former called the latter 'Little prig;'
> Bun replied,
> "You are doubtless very big;
> But all sorts of things and weather
> Must be taken in together,
> To make up a year
> And a sphere.
> And I think it no disgrace
> To occupy my place.
> If I'm not so large as you,
> You are not so small as I,
> And not half so spry.
> I'll not deny you make
> A very pretty squirrel track;
> Talents differ; all is well and wisely put;
> If I cannot carry forests on my back,
> Neither can you crack a nut."'

This great characteristic, then, is the spirit of competition; competition for material wealth, in industrial enterprise, in every profession and occupation, and for every situation of honour or emolument. Undoubtedly the same motive has always actuated the human race, but *organised* competition belongs especially to our own period, and it is only in the present generation that we have been asked to bow down and pay homage thereto. Formerly, for instance, scholarships and fellowships were founded to furnish men with the means of pursuing their studies mainly according to their individual bent; now, however, in a noteworthy speech delivered by the 'apostle of competition,' the present Secretary of State for the

Home Department, on the presentation day at the University of London in 1872,* we are told that students are almost to make scholarships and exhibitions their end, and that beneficent individuals are to found them, and so run no risk of their charitable intentions being altered by future Education Commissioners, inasmuch as such endowments could not possibly be abused.

As a logical outcome of this position, he proceeded to argue that the highest function of a university was not to teach, but to examine; and that professorships and fellowships should be disendowed, because the best and most successful teachers would get plenty of pupils, assuming that their chief object was 'to cram' for examinations, and that the advancement of knowledge by originality of idea or experiment and by accuracy of research, was of little importance. That competition in reading addresses and in rapidity of delivery is a fair test of the fitness of a telegraph or postal messenger for his situation is quite true, but whether every government post of trust and responsibility should be filled on a system similar to that lately advocated by the Right. Hon. Robert Lowe, before a select committee of the House of Commons, is, I think, open to question. I refer to this general topic because I find the same ideas making rapid strides in our own profession; and although up to a certain point competition is not only useful but necessary, we should carefully keep before us the special dangers attached thereto. The most recent example is afforded by the Council of the College of Surgeons in calculating, to two places of decimals, the claims of every medical school to public support. By this means they will probably

* *The Times*, May 17, 1872.

succeed in 'levelling-*up*' the teaching of the various professors and lecturers to the necessary standard for their membership. In addition they should work out to the same nicety the particular subjects in which candidates fail, and publish the results in the *Times* as well as in the medical journals, and then 'cramming' would once more quickly take its due position in the education of the medical student.

But turning to our higher examinations, the competition that is engendered and encouraged has some great drawbacks, which, I fear, are not sufficiently considered. In the first place, and this is particularly true of our own profession, we can only test one side of a candidate; viz. his powers of acquisition and the facility with which he can reproduce the facts and theories stored up in his memory, whilst other qualities, such as accuracy of observation and readiness of action in emergencies, must be entirely overlooked. The acknowledgment of the element of chance in all our examinations at once shows this most conclusively, and a correct criterion of a man is frequently not obtained, although his future career is so largely dependent thereon.

Again, competition leads men into exactly the same groove, and renders them *fac-similes*, good or bad, of each other, or of their more immediate and successful teachers. This competition, in the case of the University of London, is spread over so long a part of that period of life when habits once formed are with great difficulty reformed, that many persist in the same line of acquiring the views of everybody else on every subject, without having any judgment of their own or the power of forming it. They are consequently at the mercy of every specious doctrine, and ready to hold any outrageous idea of disease and its treat-

ment, or to doubt the efficacy of the most potent remedies in cases the most suitable for their administration. Books are read and lectures attended, not for their intrinsic merits, but for 'what will pay,' inasmuch as the practical benefits to be derived from the system of payment by results, are as quickly appreciated by the student as by its older advocates. At a recent discussion by the Convocation of the University of London, on the substitution of German for Greek at the matriculation examination, after much bathos about the homogeneity, complexity, subtility, richness, and power of the former language, the advocates of the change came to the great practical question, 'Which will pay best?' And so a language that can be mastered by a residence of a few months in a neighbouring country is to be put on a footing of equality, as a means of higher education, with one which contains works that have done more to develope true culture (so essential in these days of exact science and mechanical detail) than all other writings since, those of Shakespeare, Dante, and Goethe, alone perhaps excepted. Although 'the University has no wish to discourage Greek,' this will practically cause its removal from the curriculum of a large number of our schools; leading one almost involuntarily to apply to their subsequent scholars the touching words of Milton in reference to his blindness:

'And Wisdom at one entrance quite shut out.'

Too little insisted on also, is the tendency of these severe competitions to foster men who are more ambitious of honours than their health or talents warrant, and who, instead of cultivating their powers of observation, and striving to obtain that technical knowledge which would

make them of the greatest use as individual practitioners, fritter away their time in trying to learn theories which they cannot grasp, and to collect facts too numerous for their retentive powers. In this way much positive harm is done, and instances of this must flash across the minds of all the older members present; while it seems to me doubtful if the best men are improved, or even come scathless out of the ordeal. The mathematical honour lists at Cambridge show that the first men do not always turn out best in their future careers, and generally others who occupy a lower position, come eventually to the front with fuller and more matured powers, and surpass those, who having so early exhausted their mental vigour, can do no more good work in the advancement of knowledge. I am afraid that, as in the domain of practical politics, so in that of intellectual thought, we are too rapidly following in the footsteps of our cousins across the Atlantic, who, since the War of Independence, having taught every child to read and write, have produced from amongst them one thinker only of acknowledged power and originality; —Emerson.

I am particularly influenced in making these remarks at the present time by the fact that a man of so much authority as Professor Todhunter, in a recent work, entitled 'The Conflict of Studies,'* awards the palm, among branches of general education, to the mathematical, rather than to the experimental, or the natural sciences, not solely on account of their mental effects, but he adds the monstrous reason, that attainments in the latter cannot be so readily tested by examination, forgetting that the aim

* P. 6, *et seq.*

of all education should be, not to communicate a result, but to impart a power. Moreover, as examinations cannot but be imperfect, *education*, whose proper object it is 'to lead the mind to discern for itself, and not to rest on memory for rules to guide our art and practice,'* should be sedulously watched and guarded, and hold its due place as the *primary* factor in the production of the individual both as a man and as a medical practitioner. The obliteration of the individual in averages, and the sifting of competition, may be necessary ingredients in the great natural law of the 'survival of the fittest,' but the process is at best a very harsh one, and I am not satisfied that the result is as certainly beneficial as the well-known lines of the Poet Laureate would seem to imply,—

'Knowledge comes, but wisdom lingers, and I linger on the shore;
And the individual withers, but the world is more and more.'

On the contrary, I look on Individualism as the necessary, and indeed only, protest against the present all-pervading spirit of competition, with its 'payment by results,' and consequent copying of our teachers and successful fellow-students, for, as Dr. Paris says,—

'It is an instinct in our nature to follow the track pointed out by a few leaders; we are gregarious animals in an intellectual as well as in a physical sense, and we are addicted to routine, because it is always easier to follow the opinions of others than to reason and judge for ourselves; and thus do one-half of the world live as alms-folk on the opinions of the other half.'†

To develope this Individualism, we should assiduously

* F. W. Newman, *Miscellanies*, p. 302.
† *Pharmacologia*, edit. ix. p. 77.

cultivate many of our attributes, which cannot be weighed scientifically, but which mark out and differentiate our particular intellectual character and mode of thought, and seem to depend on so many complex causes, such as hereditariness, temperament, early education, &c. In criticising a man's mental structure, we are much too apt to over-value the cold impartiality of the intellectual or scientific reasoner, and to forget the great advantages of a certain amount of faith and enthusiasm in literature and in medicine, even if we are forced to make some allowances in weighing the conclusions. These qualities have been largely possessed by the greatest and most illustrious men in our profession, whereas the tendency of pure intellectualism has been to develope the general scepticism which has marked the medical teaching of late years. They have pre-eminently characterised those physicians who have achieved the most lasting reputations as teachers; and here I would especially refer to one of the founders of the medical school of this college, the late Dr. Todd, whose memory is so much venerated by the elder generation of King's men, who so freely acknowledge the great benefits derived by them from his teaching and example. As a corrective to the rigidity of the purely scientific mode of thought, the æsthetic side of art, literature, and science, must not be lost sight of, as this is of vital importance in any attempt to reach the perfection of the individual character; for true culture, to quote the words of Mr. Matthew Arnold, 'leads us to conceive of true human perfection as a harmonious perfection, developing all sides of our humanity;'* and though we shall never grasp the fulfilment of this ideal,

* *Culture and Anarchy*, Preface, xvi.

we must strive to attain thereto, remembering that he who never despairs seldom completely fails.

As Individualism is of great importance in the formation and preservation of the highest intellectual thought, so it is also a primary influence in maintaining a high standard in medicine, which, as was so well expressed by my friend, Dr. Baxter, in a former introductory address, is 'to us, not only an occupation but a life.'* It has led the wisest and best men in our profession to think out for themselves the great problems of health and disease, and has prevented them from becoming mere physicists, chemists, or morbid pathologists, instead of true clinical physicians. The insistence on the observation of the phenomena of disease during the life of the patient is especially opportune and necessary just now, when on all sides we have inferences drawn concerning its nature, and suggestions made for its treatment, from laboratory experiments or *post-mortem* appearances only. These, of course, are extremely valuable as physiological or pathological studies; but when forced into opposition to careful clinical observation, occupy a position which they are not warranted in assuming.

It is curious and interesting to watch the different phases of medical literature, and see how, with new means of investigation, and with more complete knowledge of each science, and of its peculiar methods, that science becomes the theoretic pivot on which our practice is made to turn. Thus in so short an experience as my own, we have had four distinct schools claiming to govern our therapeutics, viz. the expectant, the statistical, the chemical, and now the physiological.

* *Medicine and the Allied Sciences*, p. 16.

Of these the 'expectant' has been of extreme value, by teaching us to examine the phenomena of disease as they occur, and without the introduction of disturbing elements. By it we have learnt the course, duration, and termination, or 'natural history' of the more acute diseases, and the harm that is frequently done by interfering with their normal evolution. 'Cutting fever short' is now hardly ever mentioned, even by the public. On the other hand, the practice was often allowed to run to an extreme, and to paralyse our treatment; for we must not forget that lives have undoubtedly been saved by using remedies judiciously and promptly, even in acute affections, *e. g.* in pneumonia, erysipelas, diphtheria, &c. The expectant plan is but the revival of an ancient system, for the disciples of Ernst Stahl followed nature so implicitly that their practice was named, '*A meditation upon death.*'

The 'statistical' method has been pushed beyond all precedent by Hughes Bennett, to enforce his so-called *restorative* treatment of pneumonia,* as if all cases called by this name were exactly alike, and as if a few cases described minutely were not worth more than any number of incomplete observations heaped promiscuously together. The fallacies of this method, when thus applied, are so glaring, that one wonders at its ever being resorted to in the decision of individual therapeutic problems.

To the 'chemical' school we are certainly indebted for the knowledge of the action of those remedies whose behaviour in the organism and in the laboratory is similar, and whose decompositions can be readily followed. Besides the chemical antidotes and escharotics, they are,

* *Clin. Lect. on Medicine*, 3rd edit. p. 287, *et seq.*

however, limited to the groups of Antacids and Antilithics or Lithontryptics, and deal only with the secondary effects of the diseases in which they are employed, and so are apt to make us lose sight of the necessity of endeavouring to ascertain the conditions causing the ailments we are treating. This school, although temporarily obscured by other doctrines, has had a long period of supremacy, for its present disciples owe the fundamental ideas of their system to Basil Valentine, Paracelsus, Van Helmont, and their successors, whose extravagances should have been a warning against such unwarranted claims in its behalf as have recently been advanced.

I well remember how greatly I was charmed in my early student-days with the simplicity of disease and its treatment, as shadowed forth in a book, then at the height of its popularity. Writing in 1857, the late Dr. Bence Jones says, 'that the theory and practice of medicine are in a transition state, and that the ground is being cleared for a new structure, based on the theory of the conservation of energy.'* He divides diseases into mechanical and chemical, and the latter into diseases of suboxidation and peroxidation,—the latter class containing affections as remote as Bright's disease and hydrophobia. He assumes that he has satisfactorily explained by animal chemistry, hypertrophy, atrophy, and fatty degeneration, and looks forward sanguinely to the detection of the difference in chemical composition, which he is sure must exist, between an ordinary epithelial cell and an epithelial cancer-cell.† He includes the whole art of therapeutics in questions merely of diet and drugs

* *Lectures on some of the Applications of Chemistry to Pathology and Therapeutics*, p. 274.

† *Vide supra*, p. 257.

acting chemically, and rest acting mechanically; and at the end of the work refers the reader to papers on twenty-two groups of substances, of which, to one's great surprise, only two or three have ever been used in medicine. The human body is literally looked on as a laboratory or a watch, and the necessity of the administration of food to postpone the fatal termination of a case of chronic gout is thus singularly pointed out,—

'Thus the original chemical disease of suboxidation of the urates may cause such an entire loss of mechanical power that not even a crumb of food can be raised to the mouth, or a fly can be driven away from the skin, and death would soon result from the debility of starvation, if external force was not made to compensate for that which cannot be produced within.'*

I had thought that this school had altogether given way to the physiological one, now coming into prominence, but a curious link between them is to be found in some lectures delivered by Dr. Fraser before the Royal College of Physicians, Edinburgh, and published last year in the *British Medical Journal*, in which (following Blake and Rabuteau) he enunciates the following conclusions: †

α. Salts of the same base have analogous actions. The exceptions to this law are so numerous, and depend on so many other conditions, that it is really not worth laying down; *e.g.* compare ammonium carbonate with ammonium chloride, or sodium sulphate with sodium chloride.

β. Isomorphous substances produce similar effects; but chloride, fluoride, bromide, and iodide of potassium

* *Vide supra*, p. 147. † Vol. i. p. 371, *et seq.*

are isomorphous, so are the sulphates of zinc, iron, and magnesia, and also the phosphate and arseniate of soda.

γ. The metals are more active physiologically according as their atomic weights are more elevated. Passing over the puzzle as to how the activities of substances producing the most diverse physiological effects can be relatively compared, he illustrates this law by the examples of sodium, potassium, and thallium. 'Sodium, with an atomic weight of 23, is inert; potassium, 39, is active in moderate doses, while thallium, 204, is a dangerous poison;' he omits lithium—a more manifest member of the alkali group than thallium—which is so strongly recommended by Dr. Garrod for its activity and the smallness of its combining number, 7. Again compare copper 63·5 with lead 207; mercury 200, with bismuth 210; or even more striking still, arsenic 75 with antimony 122. Fourcroy in the last century expressed an idea of equal value, when he said that the virtues of mercury were due to its specific gravity.

Now we hear on all sides the announcement of, and mutual congratulations on, the near approach of a scientific pharmacology, deduced from experiments on the lower animals, as the true starting-point for the future treatment of disease, and Claude Bernard, by his researches on curare, is hailed as the pioneer of the new science. Whilst believing that as in the chemical school, so there is also in this a certain amount of truth, still I fear for both the same danger,—that their very exactitude will prove the weak point in their application to therapeutics. Experiments on lower animals, such as frogs, lead to definite and calculable results; but we all know that with different human beings the same doses of iodide of potassium, mercury, morphia,

and other drugs, act very differently. We dismiss the fact summarily by calling it *idiosyncrasy*, but this is a mere confession of our ignorance. Human beings moreover are not singular in this idiosyncrasy, for on referring to the report of the well-known experiments on the influence of mercury on the biliary secretion, by the Edinburgh committee of the British Association, which was read at the Norwich meeting in 1868, we find that a young retriever (D. Table 1), under similar external conditions gave very different results to the other dogs operated on; and the author of a prize essay read before the medical society of Lyons has recently stated that chloral differs in its action on dogs, according to size, stature, and race; 'old dogs being more readily influenced than young ones, and hounds and spaniels than bulldogs or terriers.'* These researches tend to show that the higher in the scale is the animal experimented on, and the more complex are its vital phenomena, the farther removed is the result from the certainty attainable when lower animals or inorganic substances are the objects of our investigation. Again, with many of our most useful drugs, well-defined and characteristic effects are not produced on the *healthy* organism, and it is the presence of the disease which elucidates the action of the remedy. Thus no one from its effects in health could have inferred the beneficial action of iron in anæmia, of bromide of potassium in epilepsy, or of quinine in ague. Our ignorance of the tissue-changes which constitute the first stage of most diseases is another barrier to this method; we know not the primary departure from health in such an every-day affection as gout, for when uric acid is detectable in the

* *Lyon Medical*, 1872. Tome ix. p. 300.

blood, and we combat its presence, the disease is far advanced. Hence we are unable to make use of the substances employed in exact physiological experiments, although their action is so definitely localised, that one is stated to influence 'the cardiac inhibitory ganglia, another the nerve fibres intermediate between these ganglia and the ends of the vagi nerves, and another these endings themselves.'* The conditions on which health and disease depend are still too complex and ill understood, and the differences in the same disease in different individuals are so inexplicable, that as yet only the roughest generalisations can be made, and the more mathematical and precise a science becomes, the more difficult it is to subject such varying and ill-defined phenomena to its dominion. To sum it up, *Truth is against Life: Life is combative; Science non-combative.* We are still reluctantly obliged to admit 'the miracle of life which will not be expounded, but will remain a miracle.'†

Under the physiological method we must return to the symptomatic treatment of disease, and use cold to lower increased temperature, atropia to dilate contracted pupils, nitrite of amyl to relax abnormally contracted small arteries, &c., quite overlooking the varying conditions on which these symptoms may be dependent. The present school of physiologists is so rapidly becoming purely physico-chemical, ignoring the subtler problems of nutrition, growth, and development, that its predominance in practical medicine will not be an unmixed benefit. The tendency to appear exact by disregarding the complexity of the factors is an old failing in our medical history, and when we read of non-lethal and

* Fraser, *supra*, p. 403.

† Emerson's *Essays:* Experience, Bohn's edit. p. 184.

minimum-lethal doses of *disease*, and see the minutely accurate numerical and graphic representation of those phenomena which can be thus shown, without the slightest reference to, or regard for any others, I fear lest we revert to adjusting the doses of our drugs mathematically, according to the plan of Alkahendi, in the ninth century, who regulated them by the rules of geometrical proportion, and of musical harmony; and so shall in some new guise reinstate the old therapeutic formula, 'the doses are as the squares of the constitution.' That this is scarcely an exaggeration of the extremes to which some mathematical enthusiasts ride their hobby is shown by Volkmann's formula for the influence of stature on the pulse; the ratio he deduces being 'that of the ninth root of the fifth power of the height.'*

The slow growth of medicine has often been urged against it by its detractors, but the more complicated the data with which any science has to deal, the more removed it is from being an exact or pure science, the less capable are its elements of being reduced to calculation, and the slower must its progress necessarily be. At present the constituent factors of the human constitution are so varying, so intricate, and so imperfectly known, while our medicinal agents are so numerous, and their real value in many cases so doubtful, that it is at all events premature to displace the old *art* of therapeutics by the new *science* of pharmacology (whose true position thereto is merely suggestive), and to substitute for the ancient *empirical* methods the modern *physico-chemical* ones. To prevent this from taking place, we must exercise our individual judgments, even if we are forced to oppose prevailing

* Carpenter's *Human Physiology*, 6th edit. p. 227, note.

ideas, and to decline following the advocates of plausible, popular doctrines.

> 'Give me truths;
> For I am weary of the surfaces
> And die of inanition. If I knew
> Only the herbs and simples of the wood,
> Rue, cinquefoil, gill, vervain, and agrimony,
> Blue-vetch, and trillium, hawkweed, sassafras,
> Milkweeds, and murky brakes, quaint pipes and sundew,
> And rare and virtuous roots, which in these woods
> Draw untold juices from the common earth,
> Untold, unknown, and I could surely smell
> Their fragrance, and their chemistry apply
> By sweet affinities to human flesh,
> Driving the foe and 'stablishing the friend,—
> O, that were much, and I could be a part
> Of the round day, related to the sun
> And planted world, and full executor
> Of their imperfect functions.'

I hope that I may not be misunderstood here. I value as highly as anyone every advance in science, and particularly in those sciences which are related to medicines, but I cannot look upon them as worthy of being called 'allied' sciences; I regard them as preliminary and ancillary thereto, and I hold that the great aim of all of us should be not to become physiologists, anatomists, or chemists, but physicians; and that to attain to this end, the only workshop is the bedside, and the best guides are observation and experience. The final purpose of our profession is 'to cure disease, to prevent disease, to alleviate pain, and to prolong life;'* we have therefore to acquire a practical art, and the perfecting of ourselves in its technicalities is the first essential. The limits in

* Sir William Jenner's *Practical Medicine of To-day*, p. 26.

chemical, physical, and mechanical remedies, are quickly reached; while the unwieldy mass of therapeutic agents used by us is so heterogeneous and chaotic, as to render any scientific classification thereof impossible. The absurd doctrines based on such attempts in the past history of physic should be enough to frighten us from further essays in this direction. Each system in turn started from some fragmentary truth, but being forced beyond its legitimate sphere, the very truth therein was endangered.

When fascinated by the brilliant seductiveness of some 'easy method,' or 'royal road' out of our difficulties, we must not forget that the tritest things in our medical experience are among the most mysterious, and we may turn with advantage to the works and practice of the true clinical physician, such as Sydenham, Trousseau, Graves, or Stokes. We shall then appreciate that empirical method which they adopted, and which, though often scoffed at, placed them amongst the greatest benefactors to suffering humanity. 'Prove all things; hold fast that which is good.'

'*Ars longa, vita brevis*,' said that very learned man, Dr. Butts, the Court physician, *vide* the narrative of 'The Lady Rohesia,' by Thomas Ingoldsby, Esq.; and, unfortunately for us, both parts of that old aphorism are still true. But a more hopeful prospect is held out to us in the 'good time coming;' for then we shall no longer use such base material substances as iron, lead, arsenic, zinc, or even our old familiar friend, sulphate of magnesia; but bid them give way to fairer and more ethereal beings in the numerous progeny of that famous quartette: carbon, hydrogen, oxygen, and nitrogen. At least that is what I gather from the following quotation: —

'The subject I have had to treat goes to the root of principle in the study of means for the cure,—I am bold to say the cure, by true and certain scientific methods, of the diseases which most severely scourge the human family and many of the lower families in the scale of living organisation.

'Gradually,—but surely as gradually,—the curer of bodies will learn from the chemist and practical physiologist, that his remedies, rapid in action, easy in administration, positive in result, must all come from the organic compounds, which are themselves a part of the organic nature.

'Thus learned, the physician will exchange dogmatism for wisdom, faith for knowledge, and doubt for certainty. He will compete with his fellows by the pure strength of intellect, he will be responsible for results without evasion, and his duties will be more solemnly his own; but he will stand where he never stood before, a conscious master in his art; he will know in what he doth believe, and the world, assured by his exactitude, will soon learn to know none but him in his vocation.'*

This is not the dream of an ancient alchemist, intoxicated with the illusions conjured up by the idea of soon possessing the *elixir vitæ*, or the philosopher's stone; but it would really seem that, even in these prosaic days, the subtle influence derived from close communion with organic derivatives like 'Methyl and the allied compounds,' will inspire with like visions the author of a paper read before the British Association of Science, and lead him, thus sanguinely, to prophesy the advent of the millennium of medicine.

I am well aware that Dr. Burdon Sanderson, in his talented address on Physiology, at the past meeting of the British Medical Association, retorted on the physician, that it was the latter 'who attempted to apply the facts of recent experiment, without any sufficient knowledge of their bearing.'† He instanced the present comparative

* Dr. B. W. Richardson, *Report of British Association of Science*, 1868.

† *British Medical Journal*, 1873, vol. ii. p. 153.

disuse of mercury in certain well-known digestive derangements, as not being deducible from the investigations of the Edinburgh Committee. Against this ingenious shifting of the true position of the question,—tried I think rather too soon,—I must strongly protest. By referring to the discussion at Oxford in 1868, on the abbreviated report presented by Professor Hughes Bennett, one is struck with the unanimity with which every practical physician, (including the president Dr. Acland,) spoke against the unwarrantable conclusions drawn by the *originator and reporter* of these researches. His inferences are even more absurd than those which Dr. Sanderson alleges throw undeserved discredit on his science, but I will only read one sentence, 'Mercury was found in the pharmacopœia, because it was copied from one to the other.'*

Such rash statements as those which I have quoted seem very prevalent among the most eager prosecutors of the new science, and tend so much to lower unduly its position with cautious observers, that it will soon have to cry out in the words of the old maxim, 'Save me from my friends.'

The special object of my address has been to show the safeguards derived from a healthy individualism, both generally and technically, and to enforce the danger of allowing it to be swamped by mere popular opinion. For economy in teaching, the unit is lost sight of, and I consider it far from being the least advantage of this society, that it is the only means in our educational system by which the expression of our individual ideas is fostered and encouraged, for elsewhere the student's judgment is

* *British Medical Journal*, vol. ii. p. 176.

overshadowed by that of his teachers or examiners, and he is only concerned in learning and reproducing their opinions. That a large element of the success of this college in the formation of judicious practitioners is due to this influence I am quite sure, and herein, as well as in promoting feelings of mutual attachment and forbearance, lie its chief claims to our support. A healthy individualism is also of great benefit to the society, and in many of its best officers, under whose management its proceedings have been most flourishing and most useful, this characteristic has been very marked. Moreover, the society appeals to the patriotism and affection of every King's man, for the name of nearly every one who has been taught here is inscribed on its records, and it is the most valuable legacy that has descended to us from our predecessors. Already it has become a sad memorial of such men as Todd, Salter, Brinton, Price, Tanner, Powles, Kempthorne, &c., who were in turn members of its executive, and who have passed from amongst us in the midst of their usefulness,—their memories and their deeds now alone remaining.

Finally, gentlemen, the enunciation of such conservative opinions on education by one barely removed from the position of a student, may seem strange, and may have been little anticipated; but they are due to a strong impression, that we are increasingly affected by a tendency to form, and unhesitatingly act on, cursory judgments, based on superficial, and therefore unreliable results; and that it is too much the fashion to glorify our own period and our own work, forgetting that we are much too near and too interested to sum up impartially the effects of our own endeavours. I have therefore felt bound to reiterate the old but still necessary motto, '*Laus temporis*

acti ;' for as the fabled Antæus renewed his strength by contact with his mother Earth, in like manner we, when baffled and almost crushed amid the clouds of speculative science, can always obtain fresh energy and vigour by returning to our *terra firma*,—the examples and teachings of the fathers of 'clinical' medicine.

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