

THE *concours* for the post of Physician to the Hospitals of Paris has just been brought to a close by the nomination of MM. Hutinel, Rathery, and Laudouzy.

By a decree of the 31st of May, M. Wurtz, the Professor of Chemistry and Member of the Institute, has been appointed a Member of the Council of the Legion of Honour.

SIR TREVOR LAWRENCE, BART., M.P., has consented to occupy the position of President of the Poor-law Medical Officers' Association, vacant by the retirement of Dr. Lush, M.P.

ADDRESS

Delivered on the occasion of the Distribution of Prizes to the Students of the Faculty of Medicine of University College, on May 20th, 1879.

By W. H. WALSHE, M.D.

MY LORD, LADIES AND GENTLEMEN,—On occasions like the present it has invariably been held to be the duty of the Chairman to address some observations to the assemblage before its separation. In yielding to the time-honoured custom I will endeavour to bear in mind that "brevity is the soul of wit," and detain you as short a time as I reasonably may.

Gentlemen students, history, we perpetually hear, repeats itself, and you yourselves at this moment furnish a not too fanciful illustration of the trite saying. You, like your predecessors of successive years, are, in regard of the event of the day, divisible into combatants and non-combatants. Now I might (catching the hint herein given, and following high precedent) take the opportunity of dwelling on the advantages of class competition, and, by an easy transition, of discussing the vexed question of competitive examinations in general. But, gentlemen, I look with little favour on a theme through which differences can be traced between you; I had rather say my little say on a topic in regard of which you all completely agree,—are absolutely one. What that topic is, you at once divine; you have all adopted medicine as the occupation of your future lives.

Now, in selecting this career, can it be said you have acted unwisely? Can you be taunted with having shown a deficiency of sagacious insight into the conditions likely to secure you as great an amount of happiness as may, in this "vale of tears," justifiably be hoped for? Believe one who has long belonged to the rank and file of the profession, when he tells you your choice betrays no such lack of wisdom.

Viewing your selection from a merely social or worldly standpoint, you have embraced a calling which with well-nigh absolute surety secures to the man who adopts it, rewards, both substantial and sentimental, by no means to be despised—that is, provided he join his profession in a spirit of thorough earnestness and devotion, with a becoming sense of the grave responsibility of the work before him, and provided he be prepared to follow it with unfaltering industry and fixity of purpose.

'Tis true, the meed of State honours that awaits you is not mighty. The first Napoleon, referring to his raw conscripts donning their new regimentals, used to say, "Each of those fellows carries a possible marshal's staff in his knapsack!" Now I fear I should go too far were I in like fashion to venture on the pleasing fancy, that each of you will bear away a possible patent of title attached to his diploma; but I can in all truth tell you, you may achieve honourable competence, with, as its effect, glorious, high-handed independence; you may win the affectionate regard of those on whom your skill is exercised; and, ever treading in the paths of honour, you may, nay will, command personal respect equal to that enjoyed by any member of the circle in which destiny may cast you. Competence, affection,

respect—what more is wanted (in the world outside home) to deck with flowers the thorny ways of life?

But 'tis not on any social advantages, be they great or small, which may await you, I care at present to dwell; I wish rather to utilise the brief moments at my disposal in glancing at some of the intellectual and emotional aspects under which your future occupation may be viewed.

It seems mere commonplace to say that the great edifice of Medicine is built up of contributions from various sciences. But underlying that commonplace is found a truth, one bearing of which (scarcely, as a rule, conceded its due importance) I desire at this moment to insist upon—namely, the wideness and diversity of scientific range of your pursuit. The multiplicity of cognate and allied subjects in the cultivation of which you may enjoy intellectual life, is, in fact, extreme; you may disport yourselves in almost endless by-paths, while feeling assured you do not really wander from the main road that leads to advancement of your art. In this respect your profession stands above even the possibility of rivalry.

Now the scientific field which seems most naturally to invite occupation is that of either pure medicine or surgery. And it is needless to say that in the clinical pursuit of either of these branches of your profession lies ample scope for the exercise of the most brilliant as of the most solid intellectual qualities, the observant, the contemplative, and the inventive.

But let us assume that, while attached to the actual art sufficiently for practical purposes, you yet, for some cause or other (say, repugnance to witnessing and dwelling on, more than absolutely necessary, the multifarious forms of human suffering), desire some other ground for intellectual recreation. You have the provinces of philosophical anatomy, human, comparative, and fossil, histology and physiology, awaiting your care, and ready to reward your toil with plenteous discovery. In handling Physiology, above all (while we cannot admit the doctrine that out of physiology, be it ever so sound, can be directly fashioned a reliable pathology), you handle an instrument of incalculable value in supplying a standard of comparison between the normal and the abnormal, in suggesting and giving direction to clinical investigations, and in explaining pathological facts and groupings. Every truth your devotion to its culture elicits will assuredly prove a direct or indirect, immediate or remote, contribution to the knowledge of disease.

Or, does your mental temperament fail to find attraction here, then the crucible and the alembic place themselves at your disposal. In Organic Chemistry, especially, you have an agent which is not only indispensable as an aid in scientific and pathological research, but which has proved of very material use in suggesting variations and in explaining the results of medical treatment.

If even yet unsatisfied, you may betake yourselves to the culture of physics, and need but recall the benefits conferred on sufferers of various classes by the inventions of Neil Arnott, to feel satisfied that in the study of Hydrostatics and Mechanics an opening exists for the practical advancement of your profession. So, too, the science of Optics, even in its mathematical department, contains a mine of wealth, yet but partially worked, for the establishment of the laws of certain perversions of vision.

Or, perchance, the "gentle science," as it has been called, Botany, has greater charm for your special idiosyncrasy. Here, again, large opportunity exists for useful work in adding to the *Materia Medica*, and in helping to prove the justness of the enthusiast's dream, that for each form of human infirmity bounteous nature has provided a fitting remedy. Well, she may not have gone thus far, but there can be little doubt Mother Earth grows simpler, yet unthought of, which will reward the labour of discovery and experimentation.

Or there is a department of study which (old as Hippocrates) at the present day more than ever solicits the devotion of earnest men, I mean Hygienics and Sanitary Science, or Preventive Medicine. If here you find a congenial sphere for the exercise of your abilities, public gratitude awaits your every effort, whether directed towards the purification of the air we breathe, the water we drink, the provisions we consume, the houses we inhabit, &c. Your place as natural leaders in all work of this description is at least recognised by the nation; you will not toil without acknowledgment of your services. What a change from a time not so far removed from the present hour, when I remember to have read in one of the lay quarterlies that some project of sanitation,

then before the public, was vitiated by one radical defect—namely, that it was proposed medical men should take part in carrying out the necessary measures. “How,” remarked the generous and far-seeing critic, “how could it be rationally expected that a body of men, who live by disease, would take a serious part in extirpating it?” The only evil I will wish our thoughtless traducer is that he may have lived to see the error of his ways.

But the quality of your minds may not easily adopt itself—may be actually antagonistic—to any one of these varieties of work, except the mathematical. Your minds may be of the most positive among the positive types; you may instinctively shrink from dealing with questions tainted with an element of uncertainty—questions to which the answers can, at the best of times, prove little more than intensely probable. Then imitate William Farr, whose mind was moulded precisely after this fashion, and betake yourself to Medical Statistics. Manipulate integers representing for you, with a certainty that may not be challenged, facts of disease; turn them, twist them, set them side by side in varied aspects connected with age, sex, season, locality, occupation, density of population, and so on indefinitely, and you still work in the legitimate realm of medicine.

Or are you endowed, by chance, with a love of the study of physical nature—land and sea, mountain and valley, river and lake: you may indulge your fancy to the top of your bent, and utilise it to the scientific and practical advantage of Physic. You may, like Arthur Haviland, contribute to an enlarged knowledge of the geographical distribution of disease; or, like George Buchanan, succeed in throwing light on its etiology by investigating the influence of various soils; or, in concert with numerous workers at home and abroad, add new facts in elucidation of that intricate problem, the influence of climate on the progress, for evil or for good, of various maladies.

Or, to cite one more illustration, has nature gifted you with the aspiration and the power to grapple with the phenomena of Mind?—is the bent of your talent metaphysical? Seize, then, the seductive opportunity, afforded through your familiarity with the physiology and pathology of the brain, of submitting to the test of an objective experience the subjective results of the metaphysician's introspection. So will you aid in showing that the psychological method of interrogating self-consciousness, as a factor of a complete system of mental science, must look for supplementary help to the study of facts, taught by observation of the brain action of others, nor ourselves, in health and disease. In a word, seek for work in that tempting borderland lying between Metaphysics on the one hand and Cerebral Physiology and Pathology on the other. There you will find Henry Maudsley has planted his standard, and brilliantly possessed himself of the previously well-nigh unbroken ground. But he, probably more readily even than others, would admit there may be found abundant acres yet uncultivated in his scientific domain, and welcome you as co-labourers to their tillage.

But whichever be the path selected wherein to expend your mind's activity, your goal will be truth, as far as accessible. All truth, absolute truth, is probably not within man's reach in any department of the sciences of observation, confessedly not in that of medicine. For example, the physiologist would doubtless delight to know, with a quasi-mathematical precision, how, in the workshop of the brain, thought is manufactured; what dynamic struggles, what chemical decompositions and recompositions, what physical tissue-changes are essential, as tertiary conditions, to the elaboration of an idea. So, too, the pathologist would gladly present his little claim to know, with minutest accuracy, what comes of these various processes in delirium, hallucination, mania, delusion; are these processes modified merely in intensity, in combination, in co-ordination? Or is there a something absolutely new in the physical and chemical brain-perturbations tributary to the production of a madman's thoughts? But with all these phenomena, we possess at the present hour only a most imperfect and purely tentative acquaintance. And fortunate it is for the physiologist that his actual responsibility ceases with their statistical element. Fortunate it is for him that the determination and analysis of the non-material force, or secondary spiritual cause, which (obeying the fiat of the Great First Cause) touches, as it were, the spring that brings into effective play that wondrous mechanism, the outcome of whose activity is thought, lies beyond his province. Well may he congratulate himself that his legitimate and enforced task extends not

thither; that if he chooses to penetrate this further region of inquiry, he does so merely as an amateur, free from scientific responsibility. For speculation, of at once the most ambitious and the haziest type, cloaking uncertainty only too absolute, would, judging from the achievements of other classes of scientists, prove the sole result of his migration into these realms of intellectual darkness yet more Cimmerian than his own.

But are *we*, physiologists and pathologists, worse off, less bewildered, in our own special provinces, than the devotee of even the exact sciences occasionally finds himself? Take the astronomer, who, as he peers on a star-lit night into the depth of the heavens, descends within telescope range countless suns lost so far away in the unfathomable regions of space, that their light (assuming that it travels at the same rate as that emitted by our own sun, about 190,000 miles in a second) would require thousands upon thousands of years to reach his eye—who, warranted by inference, to which no logical objection can be urged, accepts as fact that like solar systems exist beyond and beyond and yet beyond all these his comparatively feeble instrument can reveal, themselves launched in a universe to which there is neither beginning nor end—who feels that he is in the presence of infinite Space and infinite Matter in infinite Time, and asks himself, What is in Infinity? The problem forces itself upon him. With a craving anxiety, almost savouring of mental torture, he strives to solve it; but solution to the stupendous enigma there is none! The moment he attempts to travel from finite space, on which his marvellous calculations are habitually worked, to the infinite beyond, his power is annulled. His mind, with its existing dynamism, and subserved only by the five senses assigned the dwellers on this poor earth, in their present phasis of evolution, is incapable of conceiving the Infinite, even in the rudest and most hypothetical manner. Both for astronomer and physiologist “there are more things in heaven and earth than are dreamed of in our philosophy!”

Let the failure teach us humility. What are *we* that we should rebel against the limitation of our knowledge, when Newton himself was content “to pick up pebbles on the shores of the great ocean, Truth”? *We* must not murmur that it is our lot to furnish a goodly contribution to the “Unknowable” of Herbert Spencer! Nay, more: there may be wisdom, as assuredly there is comfort, in the notion, urged by a German physiologist, that it is rather the struggle to attain truth, than the actual amount of truth possessed, that exalts intellectual manhood. “Were the Deity,” says this unfettered thinker, “to place in his right hand all truth, and in his left only the abiding, never sleeping, yearning desire to obtain truth, *and offer me the choice*, I should humbly turn me to the left, and say, ‘Father, give me this; pure truth is fit for thee alone!’”

The emotional aspects of your profession have been “sung by loftier harps than mine”; I will not risk the marring of their harmonies by any harsh strains of my own. In lay authors, I need only remind you, you may read of the deep and solemn delight you are entitled to feel when you have demonstrably been the agents in saving or in prolonging life—of restoring one deemed wellnigh lost to those who love him. You are told with gratitude how you staunch the soldier's life-blood on the battle-field, and deftly cure his wounds so that he may live; though it were better said—as one of our own craft, Ambroise Paré, in days of yore, more modestly put the facts—“Dress his wounds, while God cures them.” The citizens you save every now and then to the State, by tracing out a new and healthful career for him, whose present way of life, you divine, must lead to premature death and decay, are spoken of as abiding witnesses to your skill. Nor is credit withheld you as mitigators of the wretchedness of pain; or, if no more be possible, as smoothers of the passage which leads to that “bourne whence no traveller returns.”

All these links between yourselves and suffering man furnish emotional attraction to the exercise of your art; through them you succeed in lending aid, slender though it be, towards lightening the wellnigh unbearable load of misery which weighs down our race, and which has made Pessimism, the dismal faith of Schopenhauer, a possible philosophic creed.

And might I here take the opportunity of saying a few words on a field for sympathy rather neglected than otherwise? I mean the sufferings of so-called “nervous patients.” “People with nerves”—that is, people the victims of various neuroses—because all means of objective investigation fail

to detect structural flaw in their organs, are complacently assigned a nosological status as hypochondriacs, and thenceforth oftentimes denied all, or grudgingly doled out the scantiest, commiseration. Let me implore you not to be thus unjust; try to believe that these sufferers may know their own feelings better than you can guess them, that their affirmations may be wiser than your negations, that their stories of indefinable torture, besetting them by day and sometimes leaving them little respite by night, may be only too literally true. Though I cannot, out of my own knowledge, on the one hand, wholly agree with Claude Bernard, nor on the other distinctly refuse to follow him in the doctrine that innervation is *always* the primary dominant power in disease, as in health, still, I feel clinically certain that what I may call the imponderable element of morbid action, that is, perverted innervation—nerve gone astray—holds the governing place within the pathological range as a regulator of human misery. Compare the man who labours under a structural defect of his heart, that may even as he stands before you kill, and who (*his cardiac nerves being tranquil*) smiles incredulously if the integrity of the organ be in the faintest fashion challenged—compare this man with another whose heart issues from the most patient physical scrutiny as a piece of perfect structure and mechanical adaptation, while his life is, in point of fact, rendered one unbroken misery by disordered innervation of the organ, and his conviction remains unshakable, in spite of all your protestations to the reverse, that its texture is profoundly diseased. The latter is a man claiming your gentlest and truest sympathy, and, though on different grounds, as justifiably as the former. Above all, do not, as some pathologists have striven to do, place him in the category of the mildly insane; call his nerves insane, if you will; but his brain is often, unfortunately for himself, only too sane. And I do not stand alone in pleading the cause of these sufferers; the late James Johnson, and, yet more earnestly, Russell Reynolds, have written eloquent words in their behalf.

Before concluding, gentlemen, I should wish to say a few words on the manner of your work. A long intercourse with my fellow-men has led me to the conclusion (despite the well-known stories of Bichat, Porson, and a few such exceptional and brilliantly gifted men) that steady moderate industry achieves greater results than fitful application of the severest kind. 'Tis not the man who wastes weeks or months in frivolous amusement, and then makes up for lost time by spasmodic efforts of fierce labour—the midnight oil burning before him, the black coffee by his side, cloths steeped in vinegar cooling his fevered brow,—'tis not this man who succeeds in raising himself to eminence, or in adding his mite to the sum of previously acquired knowledge. No! 'Tis the steadfast toiler, who never wastes the day he cannot recall, who (in the fashion that Titus of old marked each day by an *act of goodness*) never allows twenty-four hours to slip away without having performed his *act of work*,—who "hives wisdom with each studious day." 'Tis the old story of the perpetual drop, drop, drop, eating its way through the rock, while violent occasional torrents pass over its surface, leaving its substance unscathed. I was greatly interested some while ago at hearing from the lips of a philosopher who is not only one of the foremost and deepest thinkers in Europe, but one of those who has produced most veritable work, that he limits his time of actual application to a very few hours daily; but then, from the first to the last of the year, each day (no matter what be the attraction otherwise) is made to furnish its contribution of toil.

Gentlemen, the logical methods adopted of late years in the study of medicine have attracted the attention of the lay world, and every now and then, even in the columns of the political press, are made the theme of praise and held up as models for imitation. Beyond all reasonable question this homage is mainly paid us because we have learned to substitute the authority of facts for the authority of persons, and ceased to regard mere theories as deserving of recognition except as suggestive of inquiry. In the field of literature the satire of Molière, which left few of the follies of his time untouched, fell heavily on this worship of personal authority, in lines which may be freely, though feebly, rendered thus:—

All that talk was trash,
Coming from a *Nobody*;
'Twould have been exquisite sense,
Had it been said by a *Somebody*!

Time was, and recently, too, when in medicine, as in literature, personal authority reigned supreme; the smart saying "rather be wrong with Scaliger than right with the first comer" was generally accepted as the true guide to scientific judgment. We of the latter half of the nineteenth century have signally reversed all this: our motto is "infinitely rather be right with an unknown man, provided he brings us his budget of facts, than pin our faith on the unproven assertion of a host of Scaligers." The trammels of prejudice and authority have, in truth, been rent asunder; the tyranny of stereotyped ideas is dead. Cæsarism in science, as in politics, we have learned to abjure with all our souls.

In this matter I need only counsel you, *Be of your time*. Enlist your powers, as the slaves of fact, in the service of observation. Cultivate sedulously your observant faculties, remembering it is perhaps even more difficult to observe facts faithfully than to reason justly on well-observed facts. Shrink from the acceptance of theories and hypotheses as proven truths and grounds of action, be they ever so plausible, ever so ingenious, ever so apparently true, and be their paternity ever so distinguished. Let your guide to scientific faith be found in the oft-quoted thought of Goethe:—

Grey is all theory,
And green the golden tree of life!

Engraft on this faith *enthusiasm* (that galvanic battery of the intellect), which vivifies power, where it exists, and even summons it into being where it is not.

It remains for me to tender my thanks to the Council for the honour done me in inviting me to preside to-day. None can know better than myself that their invitation had no warranty in any particular fitness of mine for the office; I feel simply that in applying to one who formerly filled a chair in the College they were desirous of exhibiting their wish to tighten yet further the bonds of amity, always closely knit, that exist between themselves and the professional body.

Nor can I forget my quondam colleagues who so cordially received the Council's nomination, and yet not precisely the colleagues of old. I miss the shrewd and genial smile of the wise and learned Sharpey; the patient, accurate, and earnest Ellis no longer guides the scalpel of the young; Grant, he who, with a novel zoophyte before him, felt greater than a monarch, is seen no more; the gentle and winning devotion of Parkes has ceased to smooth away the difficulties of the zealous worker. But if these men of mark have disappeared from among us—are no longer here to dignify by precept and example the offices they filled—others have succeeded to their places as able as they to expound the doctrines of the sciences they profess, and instil into those they teach a love of that which is taught. In truth, University College seems to possess the happy faculty of attracting to its fold an ever-increasing mass of intellectual power. The props of the edifice appear to strengthen as years roll on; the edifice itself, sacred to freedom of conscience and of intellect, must endure! And that it may so endure, that its academic lustre may ever brighten more and more, is the fervent hope of him who has now addressed you.

HEALTH OF LARGE ENGLISH TOWNS

IN THE TWENTY-THIRD WEEK OF 1879.

DURING last week 4333 births and 2785 deaths were registered in twenty of the largest English towns. The births were 849, and the deaths as many as 585, below the average weekly numbers during 1878. The deaths showed a further decrease of 118 from those returned in recent weeks. The annual rate per 1000, which in the thirteen preceding weeks had declined from 29.1 to 20.5, further fell last week to 19.7, a lower rate than has prevailed in any week since the middle of June last. The lowest rates in these towns last week were 14.7 in Plymouth, 16.3 in Brighton, 16.8 in Hull, 17.2 in Sheffield, 17.4 in Wolverhampton, and 17.8 in Sunderland. The rates in the other towns ranged upwards to 22.0 in Leicester, 22.1 in Manchester, 23.2 in Bradford, and 23.4 in Oldham. The deaths referred last week to the seven principal zymotic diseases in the twenty towns were 369, and one more than those returned in the previous week; they included 102 from measles, 79 from whooping-cough, 72 from scarlet fever, and 35 from fever,