It is common for the mental excitement to subside after two or three months; at which period the motor symptoms are often scarcely perceptible. Hence, the patient is often supposed to be recovered. At this period, the paresis of the muscles usually commences; there is at first to be detected only a slight or occasional stutter in speaking, or a slight twitching of the upper lip, and a quivering on the surface of the tongue when it is protruded. In those cases in which the delirium has subsided, the mind gradually begins to manifest some feebleness; also, a slight simplicity in conversation, with some foolish bragging, especially of their health. However, the mental and motor symptoms increase together. But to continue the latter first.

The paresis extends to the limbs, affecting both sides equally, or nearly so. The patient, perhaps, complains of weakness of the knees, or places his hands on his thighs in going up stairs, or finds a difficulty in descending. There then occurs a gradual alteration in the gait. The expression of the gait, so to speak, is altered. The patient walks with evident attention and caution. The legs straddle; the head is carefully poised, sometimes as though there were on it something which the patient was anxious not to drop. The feet are raised only slightly, and quickly replaced on the ground again. There is a want of spring in the foot; and while standing the patient stands on both legs—seldom poises his body on one or other limb. There is occasionally some stumbling; there is no reeling, though there is some approach to the phenomena of drunkenness—in which also there is a paresis of the muscular power. The characters differ in the two states. There is no reckless motion in the disease. The speech, however, or rather the articulation, becomes like that of the drunkard. From the occasional stutter at first observed, the difficulty of executing the labials becomes pronounced. The patient stammers, splutters, slurs, and runs the syllables together; and, late in the disease, has a difficulty in commanding the movements of the tongue as well as of the lips. On being asked to protrude the organ, the patient opens the mouth, and retracts the tongue to the back of the mouth; then thrusts it out and in; and, late in the disease, on being asked to show it, will very commonly open the mouth, and take the hand, as it were, to assist in the protrusion. When the disease has reached this pass, it has entered the arbitrary division of the third stage. The pupils now begin to show inequality of dilatation and irregularity in shape, and differ from time to time in both respects; the power over the limbs becomes less and less; the hands are now clearly affected; the action of the fingers in manipulation is difficult. The patients fumble, as if chilled with cold; in this state, too, they are particularly fond of picking at small objects. The feebleness of limbs at length confines them to the bed. At first, the want of power is always more marked the first thing in the morning. After the patient becomes no longer able to stand from want of power, the difficulty is further increased by a commencing contraction of the limbs, especially of the inferior extremities. The patient then lies in bed, and has a peculiar propensity to huddle up the bed-clothes in heaps about his head. Difficulty of swallowing also sets in; and a disposition to cram the mouth full occurs at the same time, and requires care. In this last stage, epileptiform seizures are common; they also occur at earlier date; they are probably due to eccentric causes. At all events, enemata relieve them at once.

The mental symptoms bear throughout the characters of imbecility, which gradually increases. Elation of ideas is said to occur; the patient deals in extatic talk perhaps: millions of angels; glorious palaces; gorgeous scenes; great riches; immense strength; but the figures of speech used are of the most commonplace character—"I'm all right"; "I'm a king", etc. The state of mind is clearly pleasurable. In this respect exhibiting also a parallel to the state of drunkenness; the mind gradually increases in feebleness as long as the power of speech continues to manifest it.

[*To be continued.*]

NOTES ON

THE ADVANCE OF PHYSIC:

BEING THE ANNUAL ORATION BEFORE THE HUNTERIAN SOCIETY FOR 1864-5.

By JONATHAN HUTCHINSON, F.R.C.S., Surgeon to the London Hospital; and Assistant-Surgeon to the Royal London Ophthalmic Hospital.

[*Concluded from p.* 271.]

ARRANGEMENT and system are undoubtedly the very sinews of success, and at first sight it would certainly appear likely that nothing could better tend to economise the labour of medical investigators, and facilitate their researches, than the grouping and classifying of the materials on which they have to work. So far as Specialities do represent a reasonable system of classification, so far they are useful to science. Unfortunately, however, it is quite impossible to carry this far. Our existing specialities are chiefly founded on groupings according to the organ or part affected, and this is most arbitrary and unnatural. Were it possible to classify according to cause, an immense aid in the advancement of our art would be gained in so doing; but this would of course presuppose the diagnosis established beforehand. As it is, however, nature and disease persist in declining to allow the human body to be considered as other than one whole, and constantly permit one and the same organ to suffer under the most varied influences. It is needful, therefore, to the successful specialist, as regards any single organ, that he thoroughly understand all the various causes of disease which may come into operation; and this necessity destroys his character and imposes upon him that general course of study from which he attempts to escape. If he decline this, it is to the injury of his patients, and with peril to the progress of science.

I need but mention the recent discoveries as to the frequency of syphilitic affections of internal organs, or those relative to the influence of the nervous system in the production of a host of organic maladies, to illustrate what is meant. How is it possible for us to have such a being as an oculist proper and exclusive, when the domain of ophthalmic surgery includes syphilis, rheumatism, gout, scrofula, every type of nerve disturbances that can be mentioned, all the varied forms of cachexia, and requires for its satisfactory pursuit a full knowledge of remedies and their uses in reference to the most infinitely varied conditions of the human body? The special part of ophthalmic medicine and surgery is small, and can very easily be taught and acquired; but the general part is large, and necessitates familiarity with the whole range of pathology and therapeutics. Might I not assert the same of each one of the other permitted specialities in succession?

Year by year the specialist loses hold of the general knowledge he acquired in early life, and his range of investigation becomes narrower. Not only is he at a disadvantage in regard to the chance of making additions to our knowledge from the arbitrarily restricted kind of facts which are brought before him, but his

mind itself suffers in its grasp and power. This latter aspect is, I think, one of the most serious which the general subject of specialisms presents to us. In allusion to this evil influence of the division of labour, I may venture to quote the sarcasm of an eloquent modern writer. "We have much studied and much perfected of late the great civilised invention of the division of labour, only we give it a false name. It is not, truly speaking, the labour that is divided, but the men—divided into mere segments of men—broken into small fragments and crumbs of life; so that all the little piece of intelligence that is left in a man is not enough to make a pin or a nail, but exhausts itself in making the point of a pin or the head of a nail." In making these remarks, it is far from my desire to speak only on one side, or to keep out of view the benefits which our science owes to specialists. In the early stage of any department of knowledge, it is almost a matter of necessity that it should be in the hands of a few. But it is the highest privilege of those who thus devote themselves to the reclaiming of new spots of territory to be able, after a while, to hand them over to the commonwealth, to prove that they are now cultivated and well worthy of annexation. Thus, I trust, we may safely regard all our modern specialisms as serving, though somewhat clumsily, purposes which, on the whole, are useful. Already we discern the approaching success of several of those of oldest growth, and which have been most zealously worked. Their victory will be consummated in their own death as such. It is a mistake in observation to suppose that specialists are of modern invention. Never did they abound more than in the early stages of our profession. In the present day they are on the wane. We have got rid of bone-setters, of water-casters, of worm-doctors. The absurd distinctions between physician and surgeon are fast falling before a general recognition that the two departments are essentially one. Our oculists now spurn the title, and the introduction of chloroform has thrown the practice of operative surgery open to all.

It is true we have still not a few special institutions, but the most earnest endeavours of those connected with them are directed to the object of making them no longer necessary, by diffusing the knowledge thence possessed as widely as possible, and by demonstrating its accessibility and its importance to all who practise our noble art. Should any one doubt the correctness of these impressions, I appeal to facts. Two generations ago, the practice of eye surgery was to a very large extent in the hands of quacks, and medical men generally declined to concern themselves with it. Then came a period during which it was undertaken by certain excellent members of the profession, a majority of whom were in a certain sense specialists. The means of acquiring knowledge of these diseases became yearly better and better, and year by year the knowledge of them extended in the profession at large. For one surgeon who understood eye diseases fifty years ago, we have twenty now, and in another ten years the ratio will have doubled.

We now come to the question as to whether the amount of knowledge current in our profession has reached such an extent that it can no longer be profitably mastered by individuals. If we contrast the bulk of the volumes published a few centuries ago with those of the present day, we shall certainly be obliged to admit that the apparent increase is enormous. I hold in my hand *A Discourse of the whole Art of Chyrurgerie*, published in 1612, and a remarkably full and instructive volume it is. Before me are the ponderous tomes which comprise the *System of Surgery* of our own times; the contrast is alarming. We must not, however, be misled by appearances. The possession of large books imposes no duty to read them, far less to commit them to memory. Their chief use is for the purpose of reference, and the larger and more complete the work, the easier and more satisfactory such reference is. A rich literature, instead of embarrassing, makes a subject much more easy. There is no doubt that the details of knowledge have enormously increased, but *pari passu*, have also the facilities for becoming familiar with them.

Two hundred and fifty years ago, "Mr. Peter Lowe, Scottishman, Doctor in the Faculty of Chirurgerie at Paris," wrote thus: "If wee consider the sentence of the divine philosopher Plato, that things good are difficile, there is nothing harder than chirurgerie, the which will occupy a man all his life time to seeke out the nature of things pertaining thereto." We might adopt the same language still—there is a life's work, but there is nothing which need cause despair. May the day be far distant when any number of those who profess medicine as a practical art shall consider it needful to shirk, as being too detailed and extensive, a sound knowledge of the sciences upon which it rests.

There is, however, another point of view from which we may consider the recent additions to our knowledge. Instead of merely adding new facts which the mind must master and remember, in the greater number of instances accessions of true knowledge displace cumbrous loads of false theory. The mind is relieved rather than burdened, when once the effort of transfer is accomplished. All true knowledge tends indeed to simplicity—to the discovery of general laws which furnish the clue to a vast number of facts which were previously isolated. In this way the task, whether of acquisition in the first instance, or of retention afterwards, is greatly facilitated. There is not a single science which has not of late years been simplified and rendered more accessible to all.*

I will venture to take one instance; it shall be from a department of surgery which is by many regarded as very difficult. We have lately heard much about the Accommodation of the Eye, and I fear some have been almost tempted to exclaim, with Justice Shallow, "Accommodate! it comes from *accommodo*; very good; a good phrase." A most invaluable work on the *Anomalies of Accommodation and Refraction* has, I believe, been received with but little gratitude by a large proportion of those in whose hands it has been placed. Yet the new light which the splendid researches of Professor Donders and others have thrown upon this subject, far from adding anything to its complexity, have made it so beautifully simple, that it is now within the easy reach of any intelligent student. Not only have they done this, but they have swept aside a host of mistaken theories and conjectures, with which the subject was encumbered. No better instance of the practical fruits of pure science has been given us for many years. There is not the least doubt that this work of the Utrecht professor has already conferred the blessing of accurate sight on hundreds of Englishmen, and that it will in the future do the same for thousands more. The discovery of hypermetropia and of its cause, is a new era in our knowledge and in our practice. Let me briefly illustrate my assertion that the subject is quite simple.

I hold in my hand an opera glass, fitted with certain lenses which refract. If these lenses are too convex or not convex enough, or too near to each other or too distant, the usefulness of the instrument

* See some excellent remarks on this subject, in an article of the Teaching of Languages, in the *Saturday Review* for Jan. 21, 1865.

would be correspondingly impaired; we have an anomaly of *refraction*. In addition to the lenses, however, we find a screw which moves them. This screw is our apparatus of *accommodation*; it enables us to adapt the same instrument for objects near at hand and for those at a distance. If it were out of order, we should have an anomaly of accommodation. Now we have a fair parallel to all this in the eye, with the exception that, instead of the screw, there is a delicate muscular apparatus, by which the lens itself is rendered more convex at some times than others. If I turn this screw in the instrument and put the lenses at a great distance from each other, we have the condition of a short-sighted eye. Lengthening of the eyeball is the one cause of short-sight. It causes the refractive power to be too high for distant objects, and requires correction by a concave glass. It is possible that an eyeball may, however, be too short instead of too long; if so, we have the opposite condition, and must increase the refraction artificially. It is clear that all eyes must arrange themselves in one of the three classes; either they are of normal length, or they are too long or too short. If too short, we have *hypermetropia* or weak sight; if too long, *myopia* or short sight. Neither of these accounts for what is called *long-sight*; this is an anomaly, not of refraction, but of accommodation. By long use I might expect the screw of an opera-glass to become worn and inefficient; and this is just what happens as age advances in respect to the apparatus of accommodation in our eyes. We can no longer make the same eye adapt itself to objects at different distances; our lens has become hard and rigid, our ciliary muscle atrophied. Determined to console ourselves for the loss of our faculty of near vision in the fact that we retain that for distant objects, we call our state long-sight; although it is perfectly clear that we have gained nothing whatever. Strange would it have been if old age, which slowly but surely robs us of all, had here conferred any kind of a boon. Long-sight or presbyopia is therefore no long-sight at all; it is simply the loss of the power of accommodation; the screw has got worn and rusty, and will not work. The indication as to artificial aid in each state is clear enough, and it is most melancholy to think how many thousands of times in the past, surgeons and surgeon-oculists have given the strongest opinions against the use of glasses in some of the very cases most likely to be benefited by them.

I have ventured on this digression merely by way of proof, that much of our new knowledge is really the removal of obscurity and the making difficult subjects plain and easy. Numberless other instances quite as good might be cited. The introduction of the microscope, the stethoscope, the ophthalmoscope, as aids in diagnosis, so far from increasing the labour of the surgeon, has wonderfully diminished his work. Ten years ago, the diagnosis of amaurosis was a matter of the utmost difficulty; and to obtain any data for decision as to treatment necessitated very careful study both of the symptoms and of the history of the case. Now, a moment's glance into the eye tells us all. Nor is the use of these instruments difficult to acquire. It is only those who have not learnt them, and who consequently are dismayed at the new terms in use, who fancy that our knowledge is become more complicated and difficult of mastery. To such we may say, in the favourite words of Bacon, "Come close to your work". The mists are due to the distance at which you stand; if you will only take courage, and come close to what you want to see, you will find that it is clear enough.

Thus, then, we return the verdict, that there is no motive for restricting the subjects of medical study, and that to do so would be to act most prejudicially as regards the true interests of physic. In respect to specialties, we come to an almost similar conclusion; they may be useful as temporary expedients, and for a few individuals, but are most injurious both to our patients and to the progress of our science, if they be made permanent or be developed to excess. That there is great room for improvement in our mode of teaching, all will admit. It ought to be far more of the practical and demonstrative character than it now is; and such it will certainly become whenever our colleges shall alter their modes of examination.

There is, however, one form of specialism which I do advocate earnestly and fully. I am speaking for the advance of physic, and must speak boldly. It is that we should keep close to our own calling, and should not, in the fulness of our energy, aspire to also acquire the experience of politicians, of judges, and of generals. Art is long and days are short; and if we would secure fair time for note-taking, we shall not have much left for newspaper-reading. Not only is a certain time every day occupied to no special profit by those who indulge in this habit; but the mind is kept filled with subjects which far too frequently press themselves into its notice. Anyone who will sternly rid himself of the habit of requiring a daily dose of news, will be surprised to find how easily he does without it, and to what a remarkable extent the mind is left at liberty to engage with other topics. I shall be told that newspapers are contemporary history, and that it is disgraceful to be in ignorance of what is going on around us. To this I must reply, that there is no need to study history in daily detail, and that ignorance of our own profession is much more to be regretted.

In commencing this address, I said that before the Hunterian Society I should claim the privilege of entering upon details, and I have now to do so by making two or three specific proposals. Despite the number of our London societies, I believe that the principle of co-operative research has not as yet been developed to the extent which the interests of physic require. I would beg to suggest the formation of a Society of Comparative Pathology. The diseases of the lower animals have as yet been too much neglected; or, if not wholly so, have been studied by themselves, and not in relation with those of mankind. It is from the investigation of these that we may expect the most fruitful discoveries in the future. Despite the little attention yet given them, we have already reaped most splendid results in this direction. The discovery of a mode of preventing scarlet-fever and measles, in all probability awaits some future Jenner.

I would not propose, however, that such a Society as that alluded to, should restrict itself to the examination of epidemics or exanthemata; but that it should take up the detailed investigation of the various viscera as to their pathological anatomy. Comparative anatomy and physiology have thrown each a flood of light on their corresponding departments; and, if I mistake not, comparative pathology is a yet richer field.

Another society might, I think, be profitably instituted, under the name of Medical Travellers. Its object should be to systemise and collect information on all subjects relating to medicine in foreign parts. We are often at a great disadvantage in comparing our own experience with that of foreign medical men, whether as to pathology or treatment of disease, from the fact that the descriptions are too often furnished by observers who have studied only in one country. Many an obscure point might be cleared up, if the facts concerning it were submitted to the same

eye. Such a society or club might do excellent service in sending out small deputations with special duties allotted to them, and thoroughly informed beforehand as to the kind of facts needed. It should take cognisance, not only of foreign schools, but also of remote countries where, as yet, but little in the way of medical investigation has been done; it should appoint corresponding members in all parts of the world, to whom queries might be sent on any subject on which information was required.

Such an institution would make use of the services of the hundreds of zealous young surgeons who yearly leave our shores for distant parts; many of whom would be only too glad to obtain information beforehand as to the kind of service which they might be able to render. Want of system, and of previous preparation for our tasks, leads to the waste of an enormous amount of energy and zeal. It was well remarked, I think by Dr. Johnson, that we bring back from foreign travel in proportion to what we take out with us; and this is especially applicable to medicine.

In order to observe well, and particularly in order to make the most of short chance opportunities for observation, we must be previously well informed as to what we ought to notice.

Then, too, such a society would make use of the summer vacations of its members. Much good is already done in this way; but it is in a desultory manner. A vacation would be none the less enjoyable, because it had associated with it a subject of scientific interest. Its zest would rather be increased. A journey to Bergen and its adjacent fjords to investigate leprosy, would be just as health-giving as one for fishing; and to most of those who are accustomed to enjoy work, I unhesitatingly assert that it would give more pleasure. I am no believer in the necessity for absolute change of mental occupation, provided the occupation be one in which the mind takes pleasure. On the contrary, the attempt to eject altogether such a subject is attended by a certain degree of pain. I cannot help mentioning the very important contributions to medical literature which our late Vice-President, Dr. Peacock, has repeatedly made as the fruits of summer excursions; and the excellent *Essay on Alpine Climates*, which Dr. Weber has just supplied from a similar source.

The strides which physiology and pathology have recently made suggest to us, that it is time that the subject of therapeutics should receive more systematic attention. For long it was felt by most that this department, although of primary importance, must of necessity wait until those just mentioned had established themselves on a wider and firmer basis. We have emancipated ourselves from one system of empirical drug-giving, and are in no haste to impose another. Yet the time must come when a Therapeutical Society will be both feasible and necessary. Whether that time is come as yet, I must leave for others to decide.

Another direction in which I think aid might be given to the progress of our art, is by the more careful study of symptoms as they occur in ourselves. Sydenham has given us the example of recording his own case; and many physicians have enriched medical literature by similar contributions. I do not, however, intend so much to recommend the record of rare examples of disease when, unfortunately, we may chance to be their subjects, as that we should habitually study in ourselves what are deemed minor symptoms.

The phenomena which attend little and apparently insignificant ailments are often of the utmost interest and mystery as regards their physiological explanation. It is exceedingly difficult to compel ourselves to attend to these when they are brought before us by others; but when we ourselves are the subjects of the mysterious ache, it is easy enough to get the mind to speculate on its cause. So far from leading to hypochondriacism, the act of doing so will amuse many an hour of illness and pain. There are symptoms which would be incredible did we not ourselves experience them; and, as one instance, I may mention that there would no longer be any scepticism as to what are called reflex inflammations, did medical men sufficiently study the phenomena of disease subjectively.

Amongst the hindrances to the more rapid improvement of medicine, we must not omit to mention our great enemy. Jealous, it may be, of our puny efforts to dispute his sway, Death does his utmost to retard our science. The necessity which compels each generation to transfer its knowledge to a successor and to yield its place, acts prejudicially on all progressive sciences, but on none more so than on medicine. Just when a man has succeeded in mastering all preliminaries, when he is becoming used to the tools with which he is to work, his personality comes to an end, and another must take his place; under the necessity of beginning anew; and again, in time, succumbing to a like fate. So much of medicine is a matter of experience and memory, and admits of being transferred only with the greatest difficulty and loss, that this law of death is felt most injuriously. In any one of the more exact sciences its influence is much lighter. To us it is a matter of constantly recurring regret, as we hear of the removal of one after another of our teachers or *confrères*—the amount of empirical knowledge which is thus lost to the world. Men who, whilst living, were invaluable, depart, and but too often leave no heritage. I do not speak so much of premature deaths, although the loss which science sustains in this direction is very great; but I prefer for the present to consider simply the working of that great law under which we are all compelled, sooner or later, and it may be not until what is called old age, to yield our places to younger and less experienced successors. Let us think for a moment of how science might advance if its experts could but enjoy a double tenure of life. Where would our knowledge have reached by this, had we still amongst us the trained intellect of Hunter, which retaining its early vigour, might be supposed to have become with each discovery better fitted for future ones.

The pursuit of science may indeed be compared to the ascent of some inaccessible mountain summit. Each one who attempts it improves the path somewhat, and cuts out a few fresh steps at the top for his successors, but the greater part of life is occupied in gaining the spot where others left off. Each adventurous climber gets a little higher than his predecessor, but each one has to begin at the bottom, and there is consequently no very rapid gain. Imagine how it might be if one man were permitted to double his hold on life, and having reached the highest point yet attained, were allowed another life in which to prosecute his advantage. As a practical commentary on this, we may note that nearly all the fathers of our art have been men who enjoyed great vigour of animal health, and who attained to a good age. The discoveries which enrich an empirical science are not to be made by us whilst in the stage of youth. Harvey and Jenner were both of them beyond middle age when their great discoveries were made; and Hunter was in the full activity of scientific investigation up to the time of his death, after forty years of work. Fully admitting that it is in vain to hope for the suspension of a natural law, or waste our time in longing for a race of patriarchs of medicine, I still

think that some important practical conclusions may be based upon this consideration.

The problems before us clearly are, as regards this matter, how best to economise our own lives, and to facilitate our successors' easy attainment of the vantage-ground for which we have fought. In the aim to protract our individual periods of industry, with the systematic object of gain to science thereby, we have two points to keep in view. It is not necessary only that a man should live long in years; for, in that case, it may happen that he outlive his capability of usefulness, and present what Bacon has wittily termed the melancholy spectacle of following, whilst yet living, in the funeral of his own reputation. It is requisite that, not only shall he secure many years, but that he shall retain the mental vigour of middle age, and, as far as possible, the zeal and enthusiasm of youth. In reference to the good of science, surely we do not sufficiently consider, and in a certain sense cultivate and train, our own bodies and minds. We ought to regard our own minds just as we should the mechanism of a valuable instrument. We might compare them to microscopes, and certainly they are as well worth taking care of. If the lenses get dusty, if the wheels are out of order, if the light be removed, or the mirror broken, the value of the once splendid instrument is at an end. Did we attain the habit of looking upon ourselves objectively, of estimating our own value just as we do that of our microscopes, a great gain would follow. We should learn the absolute necessity of the utmost care of its every part, if the instrument is to last long and to do good service. I speak, of course, of the mind as an intellectual engine, not of it in its moral relations. Looking upon ourselves as lenses of greater or less power for the concentration of the scattered rays which surround us, we shall clearly appreciate the duty of keeping the glass bright.

Great, however, as is the detrimental influence of the shortness of individual life upon the progress of a science which must be built upon individual experience, there is another form of death yet more widely prejudicial. I allude to that most melancholy subject of the too early failure of the appetite for work. Men who, during the first twenty years of their course, have given high promise, suddenly experience a lapse of energy; and, although they still continue to live as most useful members of society, producing, in many instances, plenty of "fruit", they yield no further accessions of "light." In this direction, the losses to science are beyond estimate. The very men who are most capable of advancing her interest, desert her cause; and they who have painfully toiled up the preliminary heights, content themselves with a Pisgah view of the promised land, and decline to enter it. If we ask how Hunter, Sydenham, Harvey, Cooper, Brodie, did so much, we shall find that it was not only by living long, but continuing to work up to the very end of life. The necessities of the case demand a long day's work, begun early and continued until light fails. No doubt, great difference exists in men and races of men as to the endurance of long protracted work; and to this consideration we may perhaps refer in explanation of the splendid array of names which Scotland has given to the lists of science. It is well known, that no Scotchman is of age before thirty. Nor would I for a moment be understood to advise the exaction of task labour out of any one. If the energy have really left us, if the appetite be gone, if work have become a weariness and not, at least in some degree, a pleasure, then it is time that we should rest. No good would come of contending against nature. Whilst, however, we freely admit that science could gain nothing by forced contributions, it is a subject well worth our consideration, how the evil alluded to may best be met. How best can the human mind be kept resilient, youthful, energetic, through the longest series of years? I commend this problem to a profession which has for its special care the physical welfare of the community.

One of the ablest of modern observers has expressed so vigorously the importance of this subject, that I cannot deny myself the pleasure of quoting the passage.

"The real animating power of knowledge is only in the moment of its being first received, when it fills us with wonder and joy............ That man is always happy who is in the presence of something which he cannot know to the full, which he is always going on to know.........Once thoroughly our own, the knowledge ceases to give us pleasure. It may be practically useful to us, it may be good for others, or good for usury to obtain more; but, in itself, once let it be thoroughly familiar, and it is dead. The wonder is gone from it, and all the fine colour which it had when first we drew it up out of the infinite sea. ....All men feel this, though they do not think of it, nor reason out its consequences.

"They look back to the days of childhood as of greatest happiness, because those were the days of greatest wonder, greatest simplicity, and most vigorous imagination. And the whole difference between a man of genius and other men, it has been said a thousand times, and most truly, is that the first remains in great part a child, seeing with the large eyes of children, in perpetual wonder, not conscious of much knowledge—conscious, rather, of infinite ignorance, and yet infinite power; a fountain of eternal admiration, delight, and creative force, within him, meeting the ocean of visible and governable things around him."

In reference to the future prospects of physic, we must note, with some regret, the comparative neglect in the present day and in this country, of the study of medical biography and medical history. Surely, there is no knowledge so likely to enhance our zeal, as familiarity with what has been done, and what left undone for us to do, by those who preceded us. Their earnest work is an example for us, and their successive advances constitute the best kind of encouragement we can have. As the young soldier revels amid the narratives of military prowess and daring, so should the students of physic delight to contemplate the heroism in another sphere of men like Haller, Hunter, and Harvey. It is a bad sign as to our estimate of our art itself, if we do not learn to revere its seers. I do not speak of a slavish reverence for the past; that is the very last impression which an earnest mind would receive from the study of medical biography. I allude rather to that feeling of affectionate respect which springs from familiarity with the lives as well as the works of departed great ones. A feeling in which we may come almost to regard them as literally our fathers and we their sons, in which we feel as if we had inherited direct from them a glorious patrimony and an honourable name to be guarded as we should guard the paternal acres or the family escutcheon.

Nor are the lessons from a study of the history of medicine less beneficial than those of medical biography. It shows us how progress has been made, under what drawbacks, with what hindrances; how it has been achieved by unflinching perseverance, and not by erratic flashes of genius. It shows us how one fact has been added here and another there; how error was at first mixed even with the greatest discoveries, and how little by little it was eliminated, until the truth at length set in the light of many minds shone

clear and bright. It shows us, also, how science has too often received detriment from the moral weaknesses of her votaries; it paints in their true colours, as the giant enemies of progress and of truth, the vices of envy, selfishness, and greed of gain. Above all, it encourages us under those impressions of weariness and disappointment which must at times steal over the minds of all of us. It shows us what has been really gained; that the barren moor of the old maps is now a cultivated farm; that morasses have been drained; that roads have been planned; and that a country once an almost impassable wilderness is now of easy access to all.

I have ventured to hint, that our profession might with advantage neglect politics and newspapers; and I would now suggest to those who require occasional amusement and change of thought, that they should seek these, not in the pages of the sensation novel, but in the original documents of medical history. Do not take up any modern synopsis of old opinions; but read the books themselves in all their quaintness and peculiarity. They contain much valuable information, and in human interest they far exceed a large proportion of the productions of our modern press.

In concluding these remarks, I may perhaps be allowed to add that, although I have insisted throughout on the importance of earnestness and of close application to our own work if we would do anything for the advance of physic, that nothing is further from my wish than to advocate asceticism or painful labour. My assumption has been that there are few higher pleasures than those which we earn in the pursuit of duty, and which come as the reward of successful work. I have endeavoured to show that the advance of science depends almost as much upon the physical as on the mental vigour of those who devote themselves to her cause. In a certain sense I have urged what has been fairly called the duty of delight, advocating frequent resort to the sea, the mountain, and the moor, as the only means by which we can expect to maintain that healthy tone of body and mind which is so essential to scientific success.

It remains but to express a strong confidence as regards the future of our profession. Never perhaps had it brighter prospects than at present. Never did discoveries follow each other with greater rapidity than they have done during the last quarter of a century. Never, probably, were there more earnest workers, and certainly at no former period had we such splendid tools. Still, however, it is most needful that we stimulate our minds by reminders of the comparatively little that has been accomplished, and the much that is possible.

"It appears to me," wrote large-brow'd Verulam, "it appears to me, that men know neither their acquirements nor their powers, but fancy their possessions greater and their faculties less than they are. Whence either valuing the received knowledge above measure, they look out no further; or else despising themselves too much, they exercise their talents upon lighter matters without attempting the capital things of all. And hence, the sciences seem to have their Hercules pillars which bound the desires and hopes of mankind."

Let us trust for the advance of physic, that her disciples may avoid these errors; that they may recognise clearly that there are no limits to the possible extension of our science, that estimating fairly our own powers, opportunities, and responsibility, we may go forth

"Strong in will
To strive, to seek, to find, and not to yield."

CASES OF SKIN-DISEASE.

By John Barclay, M.D., F.R.C.P., Leicester.

I.—Simple Alopecia.

In the report of the meeting of the Liverpool Medical Institution, at p. 204 of the current volume, Dr. Balman's remark is quoted that "the records of medicine supply but a very few examples of the complete loss of hair." I would, therefore, add one to the list.

A. B., master printer, was seen on Feb. 24, 1853. He was aged 24, married, steady, never had syphilis. In the middle of September 1852, he noticed his hair falling off, not in patches. He could give no possible reason for it, except that he had been closely confined and working hard.

I found him a robust, very active young man. His hair had been dark brown; he was now absolutely hairless, except one or two eyelashes. The scalp was perfectly smooth; and with a magnifying-glass, no trace of hair-follicles was to be seen. The eyebrows and eyelashes were gone; also the hair on the pubes and in the axillæ; as well as the downy hair all over the limbs. He was perfectly smooth over the whole body. There was no heat of skin; no unhealthy appearance; no patches; but a simple absence of hair.

I kept him under treatment with tonics for some time, and applied various stimulating lotions and unguents to the scalp; but with not the slightest effect. The one or two eyelashes left soon disappeared; and his only inconvenience seemed to result from their loss, as he had always slight palpebritis.

He now—twelve years later—is in exactly the same state as when he left off treatment, and in perfect health.

I have met with one other case of complete and total baldness in an old gentleman suffering from calculus in the kidney; but, as he was 81 years of age, it may be considered as merely an extreme degree of the loss of hair incidental to old age.

II.—Psoriasis of Twenty Years' Standing Cured(?) by Arsenic.

In church, on Christmas-day 1863, some hundred miles from home, I observed a young lady whose face and neck, so far as I could see, were covered with red-looking scars and scaly patches of lepra or psoriasis.

I was afterwards told, when expressing my sympathy for such a sufferer, that the poor girl had always been so—a martyr all her life. Of course, in conversation, I inquired if every means of treatment had been exhausted, and learned that the family was of the straitest sect of the homœopaths. My objurgations were wanting in neither loudness nor depth; they reached the parents' ears, and the result was, an inquiry of me, by letter, whether I considered there was any chance of cure by medicine; and further, whether I would undertake to try that chance. In spite of the impossibility of communicating except by letter, I did not hesitate to do so; for I felt that it would be such a triumph for legitimate physic, such a satisfaction even to myself in these days of doubts and scepticism—of heresies, among which I rank the do-nothing theory as about the worst—to see the power of medicine exerted and evidently (though, perhaps, not logically) demonstrable. I only bargained that no remarks should be made on my want of success for twelve months.

The history I gathered was this. C. D., aged 21, was a strong, healthy, robust young lady, with not a single symptom of disease or derangement of any kind, except her one misery. There was said to be "scrofula" in her father's family. The eruption ap-