regard to these matters, we must claim Simpson as a genuine disciple of Hunter. His object was to further adhesion by the first intention, and to avert constitutional irritation. He entertained the idea that needles were less of foreign material, less offensive to nature, than ligatures. This is neither the time nor opportunity to discuss these interesting matters in association with surgery or Simpson's memory, but I cannot resist the opportunity of paying my humble tribute of personal commemoration to one who, in the combined character of physiologist, archæologist, obstetric physician and surgeon, and the giver of the greatest possible good to the greatest possible number, has perhaps never had an equal.

My last tribute in this way shall be in memory of James Syme. Like most who have specially distinguished themselves in surgery, Mr. Syme began his brilliant professional career as a teacher of anatomy. His destiny, however, had been surgery, and he soon relinquished the scalpel of the anatomist for the knife of the surgeon. His success in his newly-assumed duties was remarkable. His zeal, earnestness, and ability were speedily recognised; and although at this time he was comparatively quiet, modest, and of retiring habits, he gained hosts of admirers and friends, who foresaw in him the future chief of surgery in Scotland. He had to work his way, I may say stand his ground, in a department already occupied by distinguished teachers—Allan, Turner, Liston, and Lizars; yet the numbers of his pupils speedily became nearly as large as those of the whole of his contemporaries. At this period, before taking office in the Royal Infirmary, he, almost on his single responsibility, instituted a small surgical hospital, which he managed in all its departments with prudence and indomitable energy. Cases of special interest were sent to him from all parts of Scotland, which enabled him to display that great diagnostic power, clear judgment, rare manual dexterity, skill in design, and surgical courage, for all of which he afterwards became so distinguished. It was here also that he speedily evinced those remarkable qualities which made him the ablest clinical teacher of surgery of the day. I remember well the effects of his labours on his immediate pupils. He was their prophet in surgery, and inspired them with entire confidence in his powers. The great tact which he had in making a trivial case in surgery appear almost as interesting as one of the most complicated, was remarkable. Although in reality he had a keen relish for all the great things in surgery, he could clothe the story of a carbuncle or a whitlow with the romance of a diseased elbow—a theme rendered at that time, through his individual exertions, of surpassing interest. The migration of Liston to London left Syme on the well-won throne of practical surgery in Edinburgh and Scotland; and how he held sway, and increased his renown, is well known to all who have watched our schools during the last thirty or forty years. There is scarcely a subject in surgery which he has not touched, and thereby adorned. Besides his standard works "On the Principles of Surgery," "On Excision of Diseased Joints," "On Diseases of the Rectum," "On the Pathology and Practice of Surgery," and his remarkable papers on Stricture of the Urethra and Perineal Section, he has written more voluminously in the shape of isolated papers on surgical subjects than any practical man that could readily, perhaps possibly, be named. His operations on the jaws when they were little known in Britain, his revival of excision of the elbow, his special amputation at the ankle-joint, his ingenious plastic operations on the face, his operations on the great arteries for aneurism (on Hunterian principles, and notably on the old principle), and his bold removals of the entire upper extremity, will indelibly associate his name with the grandest deeds in practical surgery with which we are acquainted. Mr. Syme was in every sense an accomplished surgeon. His preliminary education was good; he had knowledge and skill in modern languages, and inborn taste for science and natural history, which he cherished throughout life. But a passion for surgery seemed to dominate in his temperament. Happy for himself that it was so, for it may be justly said that he was king among his fellows; and happy it has been for surgery that such a man should have devoted his great abilities to the embellishment of that department of art and science in which the disciples of John Hunter are so deeply interested.

Such themes are apt to attract too much attention from

one in my present position. It must be admitted, however, that they were at least the second object of the founders of this ceremony.

Before making my bow of conclusion I shall revert to the memory of the great man in whose honour we are assembled. In as far as we can make out, his life was happy as it was brilliant, and peculiarly so in that he was enabled, without hindrance, to indulge, to a greater extent than most men ever did, in a natural, useful bias of mind. His professional gains were estimated by himself chiefly in proportion as they enabled him to pursue his studies and increase his accumulations in natural history; and he gratified his desires in this way to an extent as fabulous as history records. Men have given thousands for single pictures, or objects of art; but who, excepting John Hunter, enthusiast above all other anatomists, ever paid five hundred pounds for a human skeleton? That his pursuits were more pleasurable to him than any other work in the world must be undoubted. Look at the results. He, in the course of years, and at the age of sixty-five, accumulated a treasury of facts in his museum and writings, which, from the time of his death to the present day, may be said to have been the fountain-head of modern science in our profession. The streams from thence have flowed in largely varied directions, and no man yet can span the course they may take! Truly his example may excite to emulation. Even the length we may lag behind should induce us to think more highly of the lofty pinnacle where he stands, alone among surgeons! The question between genius and industry is not worth discussion in his case. That he had industry no one can dispute; he has left evidence of it unparalleled among surgeons. I am a firm believer in his genius, but am of opinion that it was so tempered, so overspread, with the spirit of industry, that there was the just balance, so rarely combined in one man, which gives him a pre-eminence among mortals, and a rank in place with the greatest of human beings. He was born, the tenth child of his parents, in a modest country house in Scotland. He seems to have led the idle life of a wayward, petted boy, until twenty years of age, when his action changed, and the dawn of his future greatness appeared. He had neither wealth nor influential friends to further his worldly prospects, yet he rose to be the foremost surgeon and physiologist of his day. Heread nature more closely than most other men, and thereby came nearer in communion with the Divine Author of all. Parts of the proof of his physical labour are treasured within these walls; portions of his mental labour are, in printed form, the property of the world at large; his mortal remains rest beside those of many of England's greatest sons within the hallowed shrine of Westminster Abbey.

Such is, in brief, the story of John Hunter!

REMARKS ON SCIENTIFIC THERAPEUTICS.

Being a Portion of a Lecture delivered at Guy's Hospital.

By SAMUEL WILKS, M.D., F.R.S.,
LECTURER ON MEDICINE.

I WISH at an early part of the course to make a few general remarks on our method of treating disease, as it will save me much trouble in the future. This method, in a word, I shall have to teach you is empirical. I shall inform you to the best of my knowledge and experience what remedies have been found most effective in arresting morbid processes, or in conducting the patient safely through them; but I shall not attempt any theory or explanation of their action. We may discuss such questions (as we now constantly do) as a little mental exercise at the bedside of the patient. Neither shall I attempt to lay down any fixed principles of treatment, except such as experience has shown us can be safely adopted. For, on the belief that all our best treatment is empirical, it would be only a waste of time to make any effort to theorise. I should have preferred to offer you some principles based on true scientific grounds, and on which you could act in particular cases,—to have explained to you how we are possessed of various drugs having distinctive properties, and under what circumstances these may be

employed in disease. I believe, however, that at the present day this cannot be done, nor is it wise to speak of principles when framed from conclusions whose premises are altogether false. To say that I have no principles is a humiliating confession, and in declaring it I am conscious of running counter to the opinion of the greater number in our profession; and in acting upon it probably should be opposed to an overwhelming majority. I mean by this, that probably the larger proportion of practitioners associate some theory with the administration of their medicines. For my own part I believe that we know next to nothing of the action of medicines and other therapeutic agents; that experience alone has informed us of their value in particular diseases; that we have no especial indications whereby we can be certain of their action; or, in other words, that the individual symptoms afford us but little aid in the proper use of a drug, but that we are rather guided by the totality of the symptoms, or by what is called "the disease." We must indeed treat the disease, and not the symptoms. I know, in stating this, that I am carrying you back to a former therapeutic age, and am disturbing the very foundation of the therapeutic art. There was a time when I scarcely dared to confess these opinions to myself; and this is the first occasion on which I have been bold enough to assert them before my class. I do so now, and wish to enforce them; for I believe an attempt to theorise with superficial knowledge has been the great bane of therapeutics for the last twenty or thirty years.

I may better explain my position by a few illustrations, and then leave to you the whole range of medicine to confirm it. First of all, remember that most of our valuable remedies have come to us from unknown sources, and were never suggested by any theoretic considerations whatever. Turn over the pages of the Pharmacopœia, and see how few and valueless are those drugs which theory has proposed compared with others brought us from barbarous times and nations, such as digitalis, bark, arsenic, or ipecacuanha. Then, again, when we have found a valuable drug, and have some knowledge of its action in the healthy body, this assists us very little in the treatment of disease: for example, those which have a peculiar physiological action on the nervous system, such as opium, conium, or chloroform, are found to be of far less value in nervous diseases than quinine, zinc, or iron; whilst, on the other hand, opium and nux vomica are of more avail in any other than nervous diseases. I do not want you, therefore, to continue to do what has been done ten thousand times before—to give opium, chloroform, or conium in such diseases as tetanus, mania, or chorea, simply because you think they are suggested by the symptoms. It is because there is an apparent natural suggestion for their use, and yet they are found valueless on trial, and because also the more beneficial remedies, such as zinc or iron in chorea, have never had their action satisfactorily explained, that I employ this language; the only indication for the use of these drugs being the existence of a particular disease, and not the presence of any particular symptom. Moreover, could we treat symptoms, or influence them by our remedies, it by no means follows that it should be our aim to do so. Because a person is delirious or maniacal, you are not necessarily to neutralise his condition by stupefying him with opium or chloroform; indeed, the greatest harm frequently results from such a superficial line of practice.

Now, this is not what you would have liked me to teach you; you would have preferred that I should have laid down some plain rules and scientific principles for your guidance. I know this, for thus I felt when a student; and how pleased I was to have a guide in the person of a surgeon who could say that, with that state of pulse, you must give calomel, and, with that, you may combine opium with it; or, looking upon an inflamed surface, could inform you on principle when leeches were desirable, when a hot poultice, and when a cold one, should be applied. In ophthalmias of various kinds, you could be informed of the symptoms which indicated the use of either leeches, blisters, opium, or calomel. Nothing could seem more scientific or more self-satisfying to the student. But, alas! very soon my whole medical nature received a severe shock when I beheld this gentleman's successor ignore the whole practice, or adopt an opposite method with equally good results. The error lay with this surgeon in believing that he understood the value of symptoms—in assuming that the sym-

ptoms should be treated, and in thinking he was acquainted with drugs which could influence them. These notions were all based on a theory which no facts warranted his forming. The method, however, is still pursued by many at the present day. What many of us have heard orally and from books is a doctrine which you would all accept without hesitation were I to propound it to you as a most reasonable and just one; but, unfortunately, it is the very opposite to that which I have already declared, and am bound to teach you as the more correct one. You have heard, for instance, such a speech as this: "Do not go into the wards, and, examining the bed-card, observe the word 'pneumonia' written on it, and then take a note of the treatment to guide you in future cases, for this would be but treating a name; rather study the symptoms, so that each case may be treated on its own merits." I had myself at one time a half belief that this was true, but I now know that, even if it be true, the feat cannot be accomplished; indeed, my strong conviction is, that this vain attempt to treat a case on its merits is the grand cause of all the bad therapeutics of the present day; it has been the cause of the too prevalent discarding of drugs, and of the great modern heresy—the administration of stimulants in nearly all diseases. It seems to be taking you a retrograde course to instruct you to regard the diseases rather than the symptoms, and lead you back to pure empiricism. But when you remember that we have at present but little knowledge of the meaning of particular symptoms, that we are ignorant of the action of medicines, and that we have not satisfactorily proved to ourselves that we ought to treat symptoms, we had better have done with theory until we get a larger insight into morbid phenomena. Pope's oft-quoted lines certainly apply here:

A little learning is a dangerous thing;
Drink deep, or taste not the Pierian spring.

I will now try to show you the hazard you incur by attempting to treat symptoms rather than by regarding the disease as a whole, and treating it in the manner which experience has dictated to be the best. I think I can show you, also, the incorrectness of the opinion that a disease is nothing more than the totality of the symptoms. This, by-the-by, is the homœopathic theory. I may remind you of my every-day remark, that there are few pathognomonic signs of disease, but that diagnosis is founded on probabilities. Therefore that man forms the most correct opinion who has the best acquaintance with these probabilities; he, indeed, who has his mind most replete with pathological knowledge, who is familiar with all the diseases to which mankind is liable as observed in the sick-room or the deadhouse. Thus the acutest man often fails in diagnosis because he is ignorant of the existence of certain diseases, or at least of their frequency. This he himself will sometimes admit, declaring at the same time that the want of knowledge is of no importance, as his business is with symptoms only. Now, let us see the result of this doctrine; and you will agree with me that it is often a very melancholy one. Suppose two cases of paraplegia come before you presenting much the same symptoms. One of these you cure by tonic medicines and galvanism; for the patient has (what has been called) an exhausted state of the cord, induced by excesses, or perhaps by a railway shock, whereby the tone of the nerve-centre has been lowered. You adopt the same treatment in the other case, with complete failure, but afterwards cure it by iodide of potassium. Why? Because, not content with observing the symptoms, you have discovered the cause of the disease to be syphilis, and then you cure him. The medicine would have been the same, and the result equally satisfactory, had the symptoms been different. Again, you cure an enlarged aguish spleen by quinine; but you administer it in vain in the hypertrophy of leucocythæmia. I have records of more than twenty cases of this affection which show the utter inutilty of the drug; but it will still be given long after you and I have done with physic, for spleen and quinine stick as closely to one another as do liver and mercury. Now, I will tell you of a case where a disregard of the cause of the disease is fraught with more serious consequences. A young girl is seized with pain in the right iliac region, accompanied by swelling and some febrile disturbance. Post-mortem experience, and nothing else, informs you that this inflammation of the bowel is very probably due to some ulceration of the appendix cæci; and the same experience will also inform

you that the lymph which is thrown out around it may, by gluing the opening to a neighbouring part of intestine, prevent further egress of faecal matter, and limit the inflammation to a corner of the abdomen. Absolute rest, therefore, is necessary, both for the body generally and the bowel in particular. Nature attempts this by temporarily paralysing the movements of the intestine, and taking away all desire for food. Now let us see the course pursued by one who does not care to recognise the disease (after homeopathic fashion), but declares that his business is with symptoms alone. He observes that the bowels are confined, that there is sickness, and that there is abdominal pain. He thereupon turns to in order to relieve these symptoms: so he first gives a purge to excite the bowels to action; and secondly, to aid in the operation of the drug, he orders a stimulating injection; thirdly, to check the sickness, he fills the patient out with gaseous effervescing mixtures; and fourthly, he advises the nurse to rub the abdomen with a liniment, to relieve the pain and flatulence. When he has adopted the four very best means which could be devised to undo what nature was attempting to perform, and set up a fatal peritonitis, he receives with the most perfect satisfaction the thanks of the friends for not having left a stone unturned to subdue the complaint. I wish I were relating to you an imaginary case; but, unfortunately, I have the reality in my mind's eye. Such a catastrophe as this arises from treating the symptoms rather than the disease. I will give you another example: I see a patient with fever, and because the bowels have not been relieved for four days a purgative is suggested to be given. I decline to order one, as the case is one of typhoid, and I prescribe for the complaint rather than the symptoms. On that very day an excessive diarrhoea takes place. I might say that all the improved treatment of fever of late years has arisen from a due consideration of the nature of the malady, whereby it is guided in its course; and this contrasts favourably with what I have seen where a "fussy" practitioner has been dealing only with the phenomena—as, for instance, applying cold to the head against the delirium; leeches to the belly to relieve tenderness; chalk mixture to arrest diarrhoea; besides some "stuff" for the cough. As regards the propriety of administering astringents in typhoid fever, we have very contrary opinions expressed by eminent men, according to their theoretical views of the nature of the disease. If we had had the result of unbiased observation, we should before this have had indisputable facts to guide us. In what cases cold should be put to the head we know not; we see it adopted where there is pain, heat, or delirium, and thus in the most opposite conditions. In speaking of fever, I might allude to the cold-water treatment, which has been so much advocated of late in Germany. Holding the opinions I do, I should not object to use it; but to those who treat fever on principle, and who consider it of the first necessity to prevent a patient with febrile symptoms to be chilled, such a suggestion as placing him in cold water two or three times a day would be almost a homicidal procedure. I am constantly seeing hæmoptysis treated with ice-cold water to the chest, and "common sense" is said to dictate its use; but, according to Dr. Chapman's theories, heat should be the proper remedy. Now, I consider it a disgrace to our profession that we are not all agreed as to whether such treatment is beneficial or not. Surely we should possess our knowledge first, and theorise afterwards.

The treatment of symptoms in a thoughtless and ignorant manner is not, however, fraught with so much mischief as when it is put in practice by educated men, and with "malice prepense." The worst sinners in this respect have been, in my experience, young men of considerable scientific attainment, and often foreigners; they could only make use of their theoretic knowledge, and had not yet discovered by a larger practical experience that it was not sufficiently sound to be put into active operation. Thus, the other day I met a young practitioner in the case of a patient who had acute renal dropsy, and he detailed to me the symptoms in a most elaborate manner, and went through a description of the urinary casts like a book. I was delighted, and expressed a hope that his patient would soon get well under the usual treatment—such as placing him in bed, feeding him on slops, giving him some salines, with perhaps some antimony, and an occasional purge. The doctor informed me that he had done none of these things;

for, since his patient complained much of weakness, he had not wished to put him in bed; nor, indeed, for the same reason, had he ventured to give such medicines as I had named; but what he had done was to order him bismuth for the sickness, and some brandy to keep him up. As for the bowels, they had not been opened for some days; but then purging would weaken him. In fact, the most opposite treatment had been adopted to that which experience has shown us to be eminently beneficial. A gentleman came to me one day complaining of diarrhoea, of which he had been the subject for some weeks. Finding it was of a dysenteric character, I prescribed some ipecacuanha, because I knew it did good in the form of disease which this patient had, although I had not the smallest scientific conception of how it acted. In about a fortnight he was completely cured. He then showed me a prescription written by a medical man of considerable intelligence, and who had ordered him a mixture and pills. Some of the ingredients composing these were compound, but by counting them all I found he was swallowing thirty-four different drugs at one dose. The doctor had given a reason to the patient for what he had done, but the gentleman could not, unfortunately, remember the several actions of the medicines. Some medical men designedly practise this method with their patients, and in good faith too; they can fill up the whole "six inches by four" after this manner: "Yes, Mr. Jenkins, your pulse is weak, and I shall prescribe a tonic, at the same time putting a little something in it to clean your tongue; for the acid rising I shall insert a little alkali, and, as your water is thick, a little something to act on the kidney, and then a little dandelion for the liver. You must keep yourself up with a few glasses of dry sherry (none other than "dry" is ever seen or heard of), and a little rum-and-milk in the morning; and, mind, a glass of beer is poison to you." If the patient were a lady, he would order something for the leucorrhœa—but she consults her physician-accoucheur specially for that. It is to be observed that we have long discontinued the use of the proper dose of medicines, and prescribe for our degenerate brothers and sisters only a "little" of them.

(To be concluded.)

NOTES OF A CASE OF SUDDEN DEATH AFTER TAKING LARGE QUANTITIES OF CHLORAL HYDRATE.

By HUGH NORRIS, L.R.C.P. Ed.

BELIEVING that the following case possesses sufficient intrinsic interest for the medical public, I do not offer any apology for communicating it through the columns of THE LANCET. I feel the less hesitation in doing so as I am now aware that a death occurring immediately after taking an inordinate quantity of chloral hydrate has yet been recorded.

J. M.—, female, aged forty-six, married, in comfortable circumstances, and whose constitution presented unmistakable evidence that she was approaching the critical period of life, had for the past seven years been occasionally addicted to excessive indulgence in stimulating liquors. In 1863 she received several mental shocks, and about the same time she also severely taxed her nervous system by too assiduously nursing a sick mother. It was subsequent to this that she first indulged to any extent in the above-named vice.

I first saw her in November, 1869, on the occasion of her suffering a severe attack of hysteria, complicated with spinal irritation; but I did not know till some months afterwards that she was the victim of dipsomania. When opposed in her desire for stimulants she became extremely violent, and, being a powerful woman, no inmate of the house escaped her assaults, or came off scathless in her struggles to gratify her desires. No treatment, moral or medical, appeared of any avail. The various diffusible stimulants and antispasmodics were in vain tried for her hysterical symptoms, and no sedative produced effect but the chloral hydrate. Of this a nightly dose soothed her more or less, and for months previous to her decease I was obliged to administer this