meeting I submit for your inspection, that you may have an opportunity of seeing the treatment in this stage. I also hope to shew you certain cases that have been operated on some time ago, and have thus satisfactorily solved the doubtful question whether the operation which at first is successful, can be permanent in its good results.

The object of the operation is to close or so far contract the opening in the abdominal wall on its inner peritoneal aspect that the protrusion of the hernia shall be limited, or altogether prevented; and the mode in which this is accomplished, is by procuring adhesion or contraction of the margin of the opening, whether at the internal ring in oblique inguinal hernia, or of the direct opening in the other form. I believe that unless the operation effect this purpose it is not likely to be successful; and as it is not possible to make certain of always accomplishing this end, a proportion of cases will fail. I find that, out of 67 cases operated on in the hospital, 11 failed altogether, 9 were only relieved, that is, though not successful altogether, yet were so much improved that the hernia was controllable by a truss; one case only died; and in this instance, death was not due to peritonitis, but to erysipelas affecting the thorax; so that, although no doubt death was indirectly due to the operation, it was not the immediate result of it. Indeed, I know of no operation of importance attended with so little danger. Wound of the peritoneum does not necessarily involve dangerous consequences; more than once I have injured it by puncture, as proved by the free discharge of peritoneal fluid, but no ill result followed. In one case related in the *Annals*, this happened; the patient recovered and wrote to me from Ceylon some months after to say that he was perfectly well. The recoveries in nearly all the cases have been rapid, and the proportion of success most gratifying; when we consider the importance of a favourable result, it is impossible not to feel satisfied that so simple a surgical proceeding should suffice so often to ensure it.

I have placed the instruments with which I operate on the table for your inspection, and you will see that they are very simple; a plug of wood, with two ligatures, a curved needle to pass the ligatures through the abdominal wall; a second small piece of wood to knot the ligatures over, completes the apparatus. The method of performing the operation is simple, but it requires some care and confidence for its effective completion. The fore-finger of the left hand oiled, is inserted into the inguinal canal, and the scrotum invaginated is pushed before it up to the internal ring with firm and decided pressure. One ligature, strong and well waxed, is then threaded in the needle, the point of which is insinuated along the palmar aspect of the finger on its radial side, until it has reached the extreme apex of the invagination; it is then forced through the abdominal parietes, and appears on a line with the anterior superior spine of the ilium; about $1\frac{1}{4}$ or 2 inches internal to. The needle is then unthreaded and withdrawn, to be threaded with the second ligature, and again introduced, this time on the other side of the finger, to be pushed through the abdominal wall as before; this time transfixing a short distance from the point where it first pierced, but emerging through the same opening in the integument.

The needle is again unthreaded and withdrawn. The plug is now pulled into the canal, the apex being firmly tied against the apex of the invagination, and the threads firmly knotted over the small piece of wood. The operation is thus completed.

The plug is left *in situ* for three or four days or more, until pus appears to flow freely from beside the ligatures. These are then cut, and the plug withdrawn. The discharge is gently pressed out, a pad and spica bandage are applied, and the patient is kept in bed and cautioned not to strain at stool for some days. As soon as the wounds have cicatrised, a truss may be applied, which should be worn for some months, especially when any exertion is made; it may gradually be left off when the tissues have become firmly consolidated. The time occupied in treatment varies from a month to six weeks in ordinary cases; if there be much suppuration, and that have burrowed among the abdominal muscles, there may be delay, and counter-openings may be necessary; but such cases are the exception. The only one was that of a native who was attacked with erysipelas and died of pyæmia, the result of cellulitis. During the period of the insertion of the plug, the bowels generally remain confined, and indeed for several days after its removal; should they act, the patient must be warned against efforts at straining.

I find, by referring to the records of my wards, that I have, up to the end of 1867, operated sixty-seven times. In 1862, I had fifteen cases, of which ten succeeded, one was relieved, and four failed. In 1863, there were eight cases, of which five were successful, two were only relieved, and one failed. In 1864, I had eight cases, of which six were successful, two relieved. In 1865, I operated in fourteen cases, of which ten were successful, three relieved, one failed. In 1866, there were seven cases, five successful, two failed. In 1867, I had fifteen cases, of which ten were successful, one was relieved, three failed, and one died.

Ram Coomas Doss was admitted on the 27th February, 1867, with inguinal hernia of left side; he was operated on, 5th March, 1867, and died of erysipelas, on the 26th March 1867. Extensive suppuration was set up between the muscles. Erysipelas took place in the chest, the cellular tissue sloughed, and free incisions were made to expose the sloughy tissues. After death, there was found consolidation of the two lower lobes of the right lung, and one large pyæmic patch of the upper lobe. There were no cardiac coagula. There was thus a total of sixty-seven cases, of which forty-six were apparently successful; nine were relieved; eleven failed altogether, and one died.

Before discharging any of those returned as cured, they were submitted to the severest tests, lifting weights, climbing up a pole, jumping, running up and down stairs without a truss; and unless they were able to bear this test, they were not considered as cured. In many of these I fear the hernia may have returned afterwards. But I have seen some after a long interval, and am happy to say there can be no doubt that in these cases the improvement is permanent.

I have placed on the table a specimen illustrative of the mode in which the occlusion is effected; it was the case of a French sailor, who had been operated on some months before he met with an accident, which caused his death. You will see that the internal ring is perfectly closed. I have also brought into the room several patients who are recovering from the operation, and so far they promise to do well. I have also some persons who were operated on at different periods of time past, and you will be able to judge by them how far we may, in favourable cases, hope to succeed. I would here repeat what I have often before stated, that I regard the operation as one of a somewhat uncertain character as to its results, but offering a sufficient prospect of success to warrant the surgeon, and justify the patient, in attempting it.

WHAT ARE DISEASES?

By SAMUEL WILKS, M.D., F.R.C.P.,
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UNDER the above name, Dr. Handfield Jones has opened up the most vital question, I believe, in the whole domain of medicine, since it shews that the very first principles of treatment are not yet settled. The writer has argued the subject in his usual judicious manner, and thus the truths which he asserts must carry conviction to all readers; at the same time, they are evidently the expressions of facts seen on one side, and are intended for those who have not thought of disease from the author's point of view. I believe, however, that there is much to be said on the other side of the question; and I myself think that, at the present day, this is the more important, seeing that the tendency of the medical mind is in the direction which Dr. H. Jones has taken.

He shews in his paper, in opposition to antiquated views, that which we style disease is nothing which the mind can grasp in the form of a distinct entity added to the human frame, but rather a deranged condition of the animal machinery, and therefore, that our art must be directed to correct such derangement rather than to be used in attempting to fight some imaginary or unknown phantom, which we call 'the disease.' In fact we must not treat something which we call disease, but we must treat the patient. It may not be that the author of this paper maintains this doctrine in all its exclusiveness, but the tendency of his remarks is certainly to support the idea; he may indeed strongly maintain it, and if so, I have no doubt the majority of the profession is with him. It is a doctrine, long inculcated at my own medical school, and one which I myself at one time enforced upon students. Having had reason, however, now for many years to very much modify my opinions, I could not refrain from expressing these in a journal which has disseminated the remarks of so distinguished a physician as Dr. H. Jones. The principal object I have in doing so, however, is a practical one; since the treatment of our patients, according to the opinion we hold, must often be at complete variance, and thus one method must be essentially erroneous; of course, I should fear no harm in the discriminating hands of the writer, but with less judicious practitioners, a false theory leads to an utter disregard of diagnosis, of the value of remedies, and to a treatment of disease based simply on popular and preconceived notions.

The question is really a most fundamental and vital one. Is there, or is there not, a sufficient resemblance in certain morbid states occurring in different individuals, and which we designate by a name, to demand a similarity of treatment? The question is to be answered by experience alone; but for myself I believe that some general principles and particular remedies may be found for the treatment of disease, not overlooking of course the individual peculiarities of the patient. I find that many in our profession, whilst acknowledging their difficulty in treating

disease, never hesitate to treat the patient; and thus, altogether ignoring the special malady under which he suffers, adopt the most heroic measures for the improvement of his present condition.

Space and time will not allow me to illustrate this but by one or two examples, and I will more especially dwell upon the present very extensive use of alcoholic stimulants in all kinds of disease. This appears almost entirely to have come about from the putting into practice the doctrine which I repudiate, that it is the individual and not the disease which is to be treated. I rarely meet with a medical man who has made that study of disease which shall enable him to say that this or that remedy is useful, but he more generally complacently confesses his ignorance, and simply has abstained from giving such remedies as antimony or digitalis because the patient was weak, and for the same reason administered in their stead wine, ammonia, or quinine. If I am called to consult in a case of pneumonia, I generally find that brandy is being given, and I naturally inquire if this has been found a good remedy in the disease; I obtain for answer that the patient was too weak to be treated by rule, and his feeble condition necessitated the stimulant. If I see a case of acute rheumatism with pericarditis treated by the same universal remedy, I get the same answer, that the patient was so low that the stimulant was absolutely required. If it be scarlet fever, typhus, typhoid, bronchitis, or other malady, they are all treated on the same plan: in fact, ammonia, ether, and alcohol might be regarded as universal medicines in acute disease, just as iron and quinine are in chronic. As for making out the disease, or treating it by methods which a close study of it in different individuals has shown to be good, this is considered interesting enough for a clinical lecture, but quite unnecessary for the good of the patient. He must be treated, and not the disease! an opinion, I believe, bad in theory and mischievous in practice. If iodide of potassium be given, the strength or weakness of the patient is not considered, but the question is, whether experience has proved the drug to be useful in cases similar to the present; but when we come to certain other remedies, whose action on the healthy body is a little more apparent, as ammonia, alcohol, or quinine, then we think we have sufficient evidence in the state of the patient to suggest or withhold their administration. Now I must state my own conviction, that we have at present no such means of recognising the need of their use, and that experience alone must guide us; in fact, I will use stronger terms, and simply deny that the supposed ordinary indications for the administration of stimulants are any real tests for their use. Taking the case of fevers, it has been thought that the muscular and nervous prostration of the patient, the weak heart, feeble quick pulse, brown furred tongue, were indications for the use of stimulants. This is simply incorrect, for such patients do well or better without them. I confess my own ignorance as to the proper tests for the administration of alcohol, but I simply deny that the usual indications warrant its use; for if so, as all diseased people are weak they all want brandy; a not uncommon argument. I hope soon that by such tests as Dr. Anstie has given us, we may have some kind of gauge; but even then I submit that experience is the best guide. My own opinion is that we have just as much right to study the effects of alcohol in particular diseases, as we have those of digitalis or bromide of potassium; and as regards any knowledge we may obtain for their administration from the character of the pulse, we have not more guide for the one thing than the other. To suppose that, because a person has a disease and is therefore feeble, he is necessarily to be assisted by alcohol, is simply a delusion; there are no facts to warrant it. For, on the contrary, we may see a patient lying in bed, having brandy poured down his throat, and with a pulse too quick to be counted, and then speedily observe its diminution in frequency and rise in strength, upon the discontinuance of the stimulant, and in case of heart-disease even a still further improvement from the administration of digitalis. Whilst, therefore, patients with all the supposed indications for stimulants will very frequently do equally well without them, we are not in possession of those rougher modes of knowledge, which will guide us to their use, and therefore we had better endeavour to learn whether they are 'good for the disease' rather than for the individual.

I have taken the case of alcohol because it is the most striking and by far the most important illustration which I can bring forward in connection with this very vital question, and it is because so many have already settled the matter in their own minds that I speak strongly upon it. But the argument applies to other remedies; and with regard to them we may ask, do we know sufficient of their action to enable us to determine in any particular case whether they will be of use or not, or are we not guided by our knowledge of their operation in cases which are similar? I think at present, a general experience of their efficacy can alone guide us. This opinion, however, is by no means always adopted. Thus I find a patient with acute albuminuria taking iron and brandy because he is so anæmic and weak; I venture an opinion that it would be better to treat the disease rather than the patient, and recommend a saline with antimony

and a purge; in a few days he is better and therefore stronger. These remedies had previously been withheld in the fear that the patient could not bear them. I also constantly witness the good effects of digitalis in patients who had not hitherto had this drug because they were too weak; and I have more than once observed the highly beneficial effects of bloodletting in bronchitis, in persons in whom the pulse was scarcely to be felt, and therefore of course venesection was to be shunned. If I see a wet rag on a patient's head and I inquire as to its use, I am told it is placed there because the head is hot, which is no reason at all. Indeed I am sorry to remark that the character of the malady, the course it pursues, and all experience as to the effects of remedies in particular complaints, are constantly put on one side in order to treat the patient.

As the whole question does not turn on the administration of so called strengthening or lowering remedies, but has a far wider range in reference to the correct methods of treating disease, I may take one or two other instances, and remind the reader of the frequent harm of arresting a diarrhoea in Bright's disease, or attempting to stop a hæmoptysis in morbus cordis, or of giving brandy and opium in cholera. The following is an instance of what I consider correct treatment. A young woman is brought to the hospital too ill to give any account of herself, but her condition clearly reveals a case of typhoid fever. On the fourth day there is no relief from the bowels, and the clinical clerk suggests an aperient dose. I reply that I am treating a case of typhoid fever in which the bowels are diseased, and no doubt contain a quantity of fluid secretion, and therefore object to the proposal. A few hours afterwards the sphincter ani becomes relaxed, and the bed is flooded by a fecal evacuation. I am thankful that I treated the disease and not the patient. Again, a person is seized with pain in the right iliac region, followed by symptoms indicating a local inflammation about the cæcum. A medical man is called in who never thinks of the probable nature of the disease, but turns to vigorously to treat the patient. To overcome the sickness, he orders effervescing medicine, and brandy with soda water; for the constipation, aperient medicines and turpentine injections, and to get rid of the flatulence, a good stimulating embrocation to the abdomen; a method than which no better could be devised to prevent the natural repair which would have taken place, and to set up general and fatal peritonitis. If the medical man would cease to treat symptoms in sudden or acute abdominal affections, more lives than I dare to think of might be saved. In peritonitis, arising as it does from so many causes, and judicious practitioners not existing in too great a number, I verily believe, though reluctant to declare it, that the patient's friends had far better never send for a doctor. If I were seized with a sudden peritonitis and could only utter a few words, they would be 'for God's sake leave me alone.'

I do not in this communication wish to undervalue the study of individual peculiarities which modify morbid processes, and therefore agree with very much which Dr. Handfield Jones has advanced; but I fear the strength of his name may help to encourage a very loose system of therapeutics which is now in vogue. In fact, the scepticism which exists as to the value of remedies, prevails very largely, and I am constrained to think that those practitioners are in the minority who have made a real study of therapeutic agents; for my own part I think it equally necessary to ascertain the exact value of such powerful drugs as ammonia and alcohol, as of digitalis, conium, or bromide of potassium. It is true, that new compounds are daily invented, but these only serve to strengthen my opinion as to the prevailing want of purpose in the treatment of disease; for surely very little therapeutic knowledge is evinced when the patient with acute disease is kept up with ammonia and brandy, and he who has chronic diseases is made to swallow, under the euphonious name of chemical food, some newfangled compound, consisting of cod-liver oil, quinine, iron, strychnia, phosphates of all kinds rolled into one. In fact, a large amount of treatment at the present day may be summarised as 'keeping up the patient'; equally satisfactory to himself and his friends. This I believe has all arisen from the withdrawal of the student's mind from the true nature of pathological processes, and the absence of a careful observation of the effects of therapeutic agents, and directing him rather to take cognisance of the patient's present condition, in order to judge simply the amount of support which he requires.

To put the matter once more in a practical shape. In the very next case of fever or pneumonia which the reader may see, he will ask himself the question, whether his patient requires stimulant or not, and he will feel the pulse accordingly. Now I do not maintain that there are not well marked signs of collapse which demand a stimulus, in fact I am sure I have saved patients' lives by their timely administration, but with such exception I hold that the doctor has something else to do than examine into the present state of his patient; he has to put together all the cases of the kind which he has seen, and then make use of his experience in the treatment of the case then demanding his attention. What do I do myself? I find that my fever patient presents all the

indications for stimulants, which are usually considered to be such, and at one time I was in the habit of administering ammonia, wine, and brandy accordingly. I have abstained from giving them, and had more recoveries, therefore the weakness of the patient is no test for their use. I have had cases of pneumonia, in which I could say nothing against the propriety of giving stimulants, by considering alone the want of power of the patient; nevertheless, I have been more than satisfied by a persevering effort to withhold them; on the other hand, I have had no reason to regret an universal order for brandy and wine in all cases of erysipelas. Let me say, finally, there is often more knowledge of the effects of remedies evinced by the man who may consider it judicious in a particular case to do nothing, than there is shewn by him whose only resources are those which tend to 'keep up' the patient. The latter may believe in physic, but knows nothing of its operation.

MEDICINE: ITS YOUNG PRACTITIONERS AND FUTURE ADVANCES.

BEING AN EXTRACT FROM THE EDINBURGH MEDICAL GRADUATION ADDRESS, GIVEN ON 1ST AUGUST, 1868.

BY SIR JAMES Y. SIMPSON, BART.,
M.D. EDIN. AND DUB., D.C. LONON., ETC.

Do not trust your fate and fortune to the letters and the influences of others. Be your own patrons. Write out your own professional claims in the results of your own professional achievements and skill, and in your professional devotion and zeal to the weal of your patients, be they rich or poor. "The poor you have always with you," may be said of all true physicians, and particularly of the young physician. They are specially his objects of care and his charge. He will find the phenomena and the treatment of disease, the same in the body of the pauper and in the body of the millionaire. And do not suppose that the devotion of your time and talents to the sick poor may not be the very steps by which you may ultimately obtain success in life. They often prove the direct means of advancement. Many physicians have found it to be so. "I crept," observed one old Edinburgh graduate, and afterwards the most eminent and best employed physician of his day in London, Dr. Fothergill—"I crept over the backs of the poor into the pockets of the rich." And he said it as an incentive and encouragement to young physicians like you—not with any mercenary motive. For no man was ever less mercenary than Dr. Fothergill. He scorned the idea of physicians becoming mere traders and traffickers in gold, for the relief of human pain and woe. "I would banish," he observes, "all thoughts of practising physic as a money-getting trade, with the same solicitude as I would the suggestions of vice or intemperance. . . . I endeavour to follow my business, because it is my duty rather than my interest; the last is inseparable from a just discharge of duty, but I have ever wished to look at the profits in the last place, and this wish has attended me ever since my beginning. . . . With a great degree of gratitude I look back to the gracious secret Preserver that kept my mind more attentive to the discharge of my present anxious care for those I visited, than either to the profits or the credit resulting from it; and I am sure, to be kept under such a circumscribed unassuming temper of mind, doing everything with diligence, humility, and as in the sight of the God of healing, frees the mind from much unavailing distress, and consequential disappointment."

Ordained this day as physicians, most of you will not, let us hope, be simply content to practise medicine as a mere means of livelihood and respectability. It is a progressive science and art which has lately moved forward rapidly, and which threatens to speed still more quickly onward for the future. Knowing this, the hearts of many in your ranks are, I doubt not, fired with the wish of assisting in its proud progress, and of advancing it by your own labours and discoveries. What subjects, then, are most patent for new researches—what fields of inquiry are most likely to bear rich fruits? Bear with me while I say a few words on this topic.

During the present century the scalpel and the microscope have developed for us a vast amount of new and most invaluable facts in the way of morbid anatomy and pathology; and this field is by no means yet exhausted. Science has, at the same time, laboured most successfully to place in the hands of the medical practitioner means and instruments by which we can perceive and discover the pathological anatomy of various organs within the body of the yet living individual. Thus, for example, by the invention of the ophthalmoscope we can look into that dark inner chamber of the eye where shadows and soul—where matter

and mind—so mysteriously meet and commune with each other; and can distinctly see the various diseases that may affect its walls or its fluid contents. The laryngoscope exposes fully in a similar way to our inspection the interior of the organs of voice. The endoscope reveals to us the conditions of other internal canals and organs. While to the instructed ear of the physician the stethoscope whispers back the diversified morbid conditions of the lungs—telling wondrous secrets as to their exact nature and precise seats. In this great line of discovery new victories are certain to be won. Do you search out other additional physical means of diagnosis for these and other viscera. Possibly even, by the concentration of electrical or other lights, we may yet render many parts of the body, if not the whole body, sufficiently diaphanous for the inspection of the practised eye of the physician and surgeon.

But the future greatest conquests for you, and for the coming race of physicians, are probably to be gained by researches in pathological chemistry and therapeutics. Pathological chemistry contains, doubtless, a rare, and rich, and most extensive mine of priceless ores and products for the future advancement of theoretical and practical medicine, and the only shafts yet attempted to be struck into its lodes have barely touched the mere surface of its boundless wealth. The most practical, however, and so far the most important objects for calm, earnest, and faithful researches, on your part, are probably to be found in the wide field of therapeutics. For the department of therapeutics, though the most important of all the departments of physic, has hitherto been the most neglected of all,—the one regarding which we know the least. The physiologic modes of action of medicines form a labyrinth, or series of labyrinths, to which we as yet in fact possess no clue. Will you strive to unlock its secret entrances? Besides, we know not enough of the simple powers of our drugs; though the practice of medicine is essentially and ultimately the practical application of therapeutic agents. In making this statement, do not misconstrue my meaning. The young physician trusts, perhaps, too much to mere drugs; the aged physician, perhaps, too little. "Do not," observed a former medical sage—Dr. Gregory—to a friend asking what kind of medical man he should employ when he settled in London—"do not employ too young a doctor—he will kill you; and do not employ too old a one, for he will merely let you die." The training of the philosophic physician consists in teaching himself when to give medicines, and what medicines;—and in what cases, and at what times, he should abstain from all drugs, and trust to nature, or to nature and hygienic means alone. He knows that a masterly inactivity is sometimes far more safe for his patients than the most efficacious but officious druggery. But when medicines are used, they should be the best and surest. We have a formidable farrago of them from the vegetable and metallic kingdoms;—many inefficient, some doubtful, and almost all repulsive in character and form. A most extensive field for new investigations in this line, lies temptingly open for the young and ambitious physician in the almost innumerable series of new chemical compounds which modern organic chemistry has evolved. Among the world of new organic chemical compounds will probably be yet detected therapeutic agents more direct, more swift, and yet more sure in their action, than any which our present pharmacopœias can boast of. It may be, also, that the day will yet come when our patients will be asked to breathe or inspire most of their drugs instead of swallowing them; or at least when they will be changed into pleasant beverages instead of disgusting draughts and powders, boluses, and pills. But that day of revolution will not probably be fully realised till those distant days when physicians—a century or two hence—shall be familiar with the chemistry of most diseases; when they shall know the exact organic poisons that produce them, with all their exact antidotes and eliminators; when they shall look upon the cure of some maladies as simply a series of chemical problems and formulæ; when they shall melt down all calculi, necrosed bones, etc., chemically, and not remove them by surgical operations; when the bleeding in amputations and other wounds shall be stemmed, not by septic ligatures or stupid needles, but by the simple application of hæmostatic gases or washes; when the few wounds then required in surgery shall all be swiftly and immediately healed by the first intention; when medical men shall be able to stay the ravages of tubercle—blot out fevers and inflammations—avert and melt down morbid growths—cure cancer—destroy all morbid organic germs and ferments—annul the deadly influences of malaria and contagions, and by these and various other means markedly lengthen out the average duration of human life; when our hygienic condition and laws shall have been changed by state legislation, so as to forbid all communicable diseases from being communicated, and remove all causes of sickness that are removable; when the rapidly increasing length of human life shall begin to fulfil that ancient prophecy, "the child shall die an hundred years old;"—when there shall have been achieved, too, advances in other walks of life far beyond our present state of progress; when houses shall be built, and many