but the companion of fools shall be destroyed." But who are the fools? Well, in the sense now spoken of, they are the libertine, the idle, the septic, and those whose coarse and unbecoming conduct repels you. Never associate with a man you cannot thoroughly respect and gain some good from. That is a simple and useful rule. Be master of yourselves in all things. "Keep a conscience void of offence." It is infinitely easier to avoid the beginning of evil than to renounce it afterwards. Temptation you must encounter. Resisting it strengthens the character as the tempest gives firmness and vigour to the fibres of the oak. Let not the holy temple of your bodies be defiled by any uncleanness. Remember Tom Hughes' advice—"The only thing to do with 'wild oats' is to put them carefully into the hottest part of the fire." A very trifling lapse from virtue may start you on the fatal path. A tiny grain may pollute and intrinsically alter a pure solution.

"The little rift within the lute,
That by and by will make the music mute,
And ever widening, slowly silence all."

Further, I must not omit to say that sufficient bodily exercise and well regulated amusement should find an important place in the scheme of your daily work. By substituting the word "medicine" for that of "law," you might well adopt the adage of the old Lord Chancellor:—

"Seven hours to medicine, to soothing slumbers seven;
Ten to the world allot, and all to Heaven."

The brain needs rest and variety of work just like an over-used muscle. As a foil to your special studies and as the best preservative against that narrowness which all mere professional pursuits are apt to engender, you should cultivate the writings of our great essayists, poets, and novelists, that is, the best thoughts of the best men in all countries. These will serve to render "distraction from labour beautiful, and not only beautiful, but beneficent."

It is a duty you owe to yourselves to attend sedulously to your health. If the flesh is weak, a spirit, however willing, can do no good. The tendency of late years, however, in all our schools is to give, perhaps, undue prominence to "sports," and to make a greater hero of the athlete than the student. That temperance (using the term in its widest sense), self-reliance and courage are largely promoted by athletic exercises, I am ready to believe, and so I should be glad to see them carefully cultivated, but always in their proper time and place. In this connection I would strongly recommend to your support the admirable gymnasium which supplies, at so trifling a cost, that exercise which our uncertain climate does not always allow of being otherwise obtained.

Gentlemen, you will find in this University the most perfect supervision, both in class and hospital-ward. This is a duty we owe to you, to your guardians, and to ourselves. Let me then entreat you to make a good beginning of your work. As you begin—diligent or idle—you will probably continue. It is usually easy to foresee from a very early period the future career of a student. Try to gain the good opinion of your teachers. It may prove of great, even vital, importance to you in after-life. Go up for each professional examination in its due place, and never roll two into one term. Trust your professors to accord you every aid and sympathy. "Good pupils make good teachers." I may be allowed to say that in Scotland the chairs are filled by men who have devoted themselves to the various subjects which they teach, and who on that account gained their academic positions. All make their teaching the main, and some make it the sole, occupation of their lives, and in this you have a guarantee that they will keep abreast of the time. If, as has been said, they do not contribute much to the ephemeral literature of the day, the explanation lies in their absorbing occupation.

I am done, and I thank you heartily for the patience you have shown me. You seek entrance into a profession whose repute each in his place can, in some measure, affect. If pursued in a right spirit, it will prove worthy of your utmost regard. It is beyond gainsay one of the most honourable and humanising of occupations; but no profession, however dignified, can ennoble those who embrace and pursue it with the sole sordid aim of gaining their daily bread. By you its honour can be sustained, and even increased; or you may convert it, as too many do, into a miserable trade, full of petty anxieties, marred by mean rivalry and jealousy, and passed in bitter toil.

BEQUESTS AND DONATIONS.—Mrs. Mary Elizabeth Tanner, of Upper Clapton, bequeathed £3,000 to the Hospital for Incurables, £500 to the Earlswood Asylum for Idiots, and £500 to the German Hospital at Dalston.

AN ADDRESS ON CHILDREN'S HOSPITALS AS MEDICAL SCHOOLS.

Delivered at the opening of the Medical Session at the Hospital for Sick Children, Great Ormond Street, London.

By TIMOTHY HOLMES, M.A. CANTAB., F.R.C.S.,
Surgeon to St. George's Hospital, and late Surgeon to the Hospital for Sick Children.

GENTLEMEN,—It is now nearly thirty years since I became an officer of this hospital, as assistant surgeon, and I have ever since retained a lively interest in its welfare. I did my best during the nine years which I served as assistant-surgeon, and surgeon, to promote the objects for which the charity was founded, and it is one of the pleasant memories of my life that the managers of the hospital were so far satisfied with my endeavours that they elected me an honorary governor. I have never since ceased to take an ardent interest in its well-doing, and I rejoice that not only does it flourish as a hospital, but that it is also advancing to take its deserved position as a school of medicine and surgery.

It is on this branch of the subject that I am to address you to-day. Far abler voices than mine have urged upon the public the claims of the Children's Hospital as a charity. I myself heard the greatest genius of the age, "the inimitable" Dickens, deliver at the anniversary dinner of the hospital by far the best speech which it was ever my privilege to hear, whether from the pulpit, the bar, or the tribune; and yearly since that time the same theme has been adorned by the eloquence of many of the greatest and best men of our time. But the question is one which does not want any argument. Not merely the advantages but the necessity of children's hospitals is admitted, and now the only question is how to make them as useful for medical instruction as they confessedly are for public charity.

The foundation of hospitals of this class was a noble and a fruitful idea, and I cannot but regret that while so many of the original founders of this institution are still alive, it should have fallen to the lot of one who is only one of their least distinguished followers and scholars to address you to-day. However, I must do my best, and, without further preface, will turn to my immediate subject; namely, the function of special hospitals, and of this Hospital for Sick Children in particular, in medical education.

Now, no one feels more strongly than I do, or has striven to express the feeling more strongly on all suitable occasions, how much medical education has suffered from special hospitals, and not only medical education, but public charity and public morals. I fear no contradiction when I say that there are many of these special hospitals which are in no sense public charities at all, but private speculations, intended not to relieve the sufferings of the poor, but to make the fortunes of their promoters; and that, so far from serving the cause of medical education, they withdraw from the general hospitals cases which are greatly needed for the instruction of students, which are especially adapted for clinical instruction, and which could be equally well (perhaps better) treated in the wards of a general hospital. We cannot in the present day afford to lose any of our clinical materials. The number of hospital-beds in London is not by any means adequate for the number of students who are to be taught medicine and surgery in those hospitals; and we have seen lately with amazement and with deep regret that royal hospitals, like St. Thomas's and Guy's, have obtained the sanction of the public authorities to withdraw a portion of their foundation from the service of public medicine, and transform it into a paid asylum, from which students are as completely excluded as from a sick chamber. The arrangement is said to be temporary; but depend upon it that, unless public attention is awakened and kept awake, neither I nor you will ever see the end of it. Abuses which ease the finances and save the labour of a great public institution can hardly be expected to cease of themselves.

It is, in my opinion, the chief objection to special hospitals, considered from the view of the public interest, that they take no part in the education of the medical profession. There was a time when they might be said to be necessary, when ophthalmic, obstetric, orthopaedic, laryngeal, cutaneous, and other special departments had no

been introduced into general hospitals, and when therefore students were obliged to go elsewhere, at whatever cost of precious time, if they would acquire any adequate knowledge of such matters. But all this is changed now, and in all such departments of medicine our general hospitals afford ample instruction. Two great classes of cases are still either excluded or admitted in such small proportions that the student is practically without instruction in them; and as they are most important in practice, a great blot on our hospital system remains to be wiped out. I mean fevers and chronic cases. The Metropolitan Asylums Board own or supervise enormous hospitals in which such cases are treated in thousands, but they are as yet closed to students. Let us hope that this will soon be remedied. And let us hope also—for I should be sorry to abandon hope, even when expectation seems hardly reasonable—that the medical authorities will one day see their way to enlarging the time for study, and taking care that this precious time is spent as largely as possible in the actual observation of disease. At present, nearly all the time which is at the student's disposal is consumed in "working up," as it is called, the subjects for the numerous examinations by which the portal of the double qualification is guarded; and it is grievous to think that much of this labour is thrown away; that the knowledge so acquired is, to use Thucydides's phrase, not "a possession for ever, but only intended for the display of a moment." Why is it that so few students can find the time to study at hospitals like this? Not because they are indifferent to the absorbing interest of the actual study of disease, and the actual personal attendance on patients, but because the examining bodies will not let them alone. They must be going every day to their medical tutors to pump the daily drench of cram into them, or to stop the daily leakage of cram out of them; and, meanwhile, the acquisition of real knowledge of disease which can only be acquired by personal attendance on cases, must be managed in the hurried intervals of all this cram. Too much teaching, too little learning, is the besetting sin of the medical education of the day—it is too demonstrational, too little clinical.

However, it is not my part to give you a jeremiad on the faults of our system of to-day. With all its failings, and they are many, I am glad to think that it has this great advantage over that of my younger day—that it compels the student to work at something, if he would get his diploma. It is to be regretted that a great deal of this work is thrown away. Still, it is work; it disciplines the mind, and prepares the man for the hard work of his future life. The medical profession is a round of continuous labour (*travaux forcés en perpétuité*), and it is well for a man on his entry into it to be forced to work. Your presence here to-day shows that the better class of students can still find time for some work of supererogation, when such work brings with it the opportunity for studying diseases which, though common in practice, are rare in hospitals.

I say, then, that some means ought to be found for utilising the great institutions under the poor-law system, and more particularly for giving students practical tuition in the unspeakably important subject of fevers, a subject more neglected than any other in our present system of medical education, if we consider it in proportion to its vast importance to public hygiene. When this has been done, and when our students are freely taught the many lessons they could learn in the parish infirmaries, I think the chief function of special hospitals in medical education would have been discharged.

This hospital for Sick Children, however, is hardly described accurately as a special hospital. It is rather a general hospital, with limitations as to age. And it differs from the special hospitals I have referred to in this important respect, that it takes into its wards cases which cannot be admitted, in any large proportion, into the general hospitals, and which cannot be so well treated there as here; and, further, that its out-patient department furnishes to the student the best substitute that he can now find for that "apprentice system" by which your fathers learned the common round of every-day practice—things which are not and cannot be taught in lectures and text-books, but which are infinitely more important to the general practitioner than any exquisite points of medical diagnosis, or any refinements of operative surgery. Such things as the common eruptions of childhood, the febrile disorders, child-crowing and croup, the early symptoms of joint-diseases, and especially hip-disease, children's nervous diseases—and I might add indefinitely to the list—are what cannot be adequately studied in general hospitals; but a familiarity with which may make all the difference to a young practitioner between success and failure; and remember that this success and failure is not a matter that involves the practitioner only; but the patient has a most real "solidarity," as the French say, in the transaction.

It is singular how common is a total ignorance of the ordinary surgical affections of childhood, even among otherwise well informed practitioners. I had once an instance of this in my own practice, which I may mention. I was sent for a few miles from London to meet a gentleman well known to me by reputation, and of high standing in the neighbourhood, about the case of a little girl. It was a common case of subacute traumatic periostitis of the femur, presenting no difficulty whatever. Yet this gentleman, who had long held a leading position in one of the chief suburbs of London, confessed to the child's parents, as well as to myself, that he had never seen such a case, and had no idea what was the matter with the child. But the same want of familiarity with the surgery of childhood meets us literally at every turn. Why do we see so many deformed limbs—so many hopeless cripples—in our streets? The diseases which produce these deformities are not in themselves usually incurable, and hardly ever need involve such deformity as we commonly see. I do not say that the blame rests exclusively on the medical attendant. Diseases of this sort are of long continuance, and require minute care and proper instrumental support during a very long time; and, however, well they may be treated at first, and however good may be the advice which the parents receive, it is but too probable, in the circumstances in which these poor children are placed, that the advice will be disregarded, and the treatment given up. Still there are too many cases to which this explanation does not apply, and in which we are obliged to confess that the disease has been overlooked, or its treatment misunderstood. No surgeon of experience can have failed to see many cases in which hip or knee disease has been confounded with rheumatism, and still more in which the necessary application of an extending apparatus, or a splint, has been neglected until hopeless displacement has ensued. When this is the case, the natural cure which under proper treatment would have only involved a slight limp, is accompanied by deformity, which renders natural progression in some cases impossible, and compels the miserable patient to make use of cumbrous apparatus, and in some cases to have resort to dangerous and uncertain surgical operations, in order to restore the limb to the straight line, which it never ought to have been allowed to quit. I could quote cases of this sort to you by the score. Two of hip-disease I remember vividly, because the fathers were friends of my own, and were both army surgeons. In neither case was the father responsible for the failure of the treatment, since he was away on military service. Both children had been treated without splint or extending apparatus till deformity was incurable. In one, it was so great that it was thought necessary to divide the neck of the femur, but with a fatal result. Now, if neglect or ignorance such as this is met with among the children of professional men, what will be the case among those of the poor? I believe that no greater benefit in medical matters could be conferred on the public than the enforcing on the medical profession the necessity of proper apparatus in chronic disease of the hip and knee; and I am sure that nowhere could this lesson be learned better than in this hospital and its most useful offsprings, the Alexandra Hospital for Hip-Disease, close by—an institution which we owe to the zeal and perseverance of a lady whom I need not name in this hospital, but whom I recollect as one of the best surgical nurses I ever knew, when I was surgeon to the old Children's Hospital.

The difference between the result of a case of hip-disease well and ill treated was strikingly illustrated in the course of an inquiry about excision of the hip, undertaken a few years ago by a Committee of the Clinical Society, of which I was a member. It had often been made a question whether the results of operation were or were not better than "the natural cure;" but surgeons had been rather in the habit of arguing the question as if the results of natural cure were uniform. In reality, every kind and amount of avoidable deformity is allowed to accompany the natural cure. We have a specimen at St. George's Hospital, in which the femur has been allowed to ankylose in an almost vertical direction upwards. It is very commonly at right angles; it sometimes crosses the other leg; and sometimes, as in Mr. Lucas's well known cases, both legs cross each other. If you contrast with cases like these the results of the natural cure carefully superintended through months or years of patient and judicious attention at the hospital in Queen Square, you will soon agree with me that the question above stated does not admit of argument, and that the limbs so treated are as far superior to those in which excision has been practised as the latter are to the neglected cases I have been indicating. But you must recollect that the care should be unremitting, and the treatment continued through months and years; abscesses early opened, frequently washed out with antiseptics, and thoroughly drained; the limb got into good position as soon as possible, and kept so, with the child in bed until all acute symptoms have long subsided, whilst the general health is carefully attended to.

I need hardly say how unfit our general hospitals are to deal with cases of this sort. They often require years of treatment instead of the weeks which they get at a general hospital. Nor are diseases of the knee different in kind, though I think they are not, on the average, so protracted as those of the hip. Consider the frequency of excision and amputation for diseased hip and knee in hospitals, as compared with their rarity in private practice, though diseases of those joints are by no means uncommon in the latter. Does not this point to a want of continuous hospital treatment for chronic diseases which might well be supplied in London at the parish infirmaries? These are now hospitals in all but the name, and have good nurses, and every appliance. Surely the money spent on the care and nursing of these chronic cases would be well invested in restoring multitudes of men and women to a life of activity and usefulness who now are allowed to become hopeless cripples.

Do not think I am wandering from my subject. You will never understand the wilful waste which is now made of the lives and limbs of the poor till you study the proper treatment of diseases of the joints in children's hospitals and convalescent institutions. I have chosen to dwell rather at length on this topic because it is one on which I have long felt strongly, and have so often had to lament, while performing an amputation or excision, the want of early care and attention which would have, in all probability, prevented any necessity for such extreme measures.

But there are many other parts of surgical practice which can only be studied thoroughly in children. I will mention a few of these, though time will only allow of a brief reference to them. One of the most urgent surgical questions of the day is with regard to radical operations for hernia—how far the cure is permanent after each kind of operation, and how far the operation is justifiable, considering the prospects of natural cure, the probability of relapse after operation and the danger of the operation itself. Now, as regards the large class of hernia which are of congenital or nearly congenital origin, it is clear that these questions can only be settled by a wide inquiry into the life-history of a number of persons affected with hernia from infancy, and carefully treated with well-fitting trusses, on the one hand, or submitted to operation on the other. For such an inquiry there are ample materials at such institutions as these,¹ and we have means of following up our out-patients which are wanting at the general hospitals; for both here and at the Alexandra Hospital out-patient visitors are kept, whose duties are thus stated in the rules of latter hospital, "To attend in their own homes, under the direction of the surgeons, cases waiting for admission and children who have been discharged, and to keep a register of all the cases she visits." I confess that it often grieves me to think how much valuable material of this kind we allow to run to waste in consequence of the haphazard way in which we see patients under the present system. Does it not seem strange that on so ordinary a question as this, and one so extremely important, the experience of all our hospitals for many generations throws no light? Ask any surgeon what his opinion is as to the chance of the spontaneous recovery of a case of congenital inguinal hernia, allowing that a well-fitting truss can be sedulously applied, and you will find that although some have an impression that cure is very rare, and others, among whom I would include myself, that it is common, if the treatment be begun in the earliest period of infancy, no one knows positively anything about it. Meanwhile we are deluged with "statistics," as they are called, that is, the results of the experience of individuals who are concerned in advocating one or another of the various operations which are now coming so much into vogue; but the essential point, that is, whether these results are any better than those obtainable without operation, is left unsettled. Pray do not misunderstand me; I am in no way opposed to this operation. I have practised it and seen it practised by others, and with the happiest results, I am not at all sure that it ought not to be performed in early childhood, in most cases of inguinal hernia, when a truss has been properly applied for a considerable length of time without success. But without some more certain knowledge on the subject, I always find myself in great difficulty in giving advice, and hardly ever recommend operation in cases where the ring is of ordinary size. And again, perhaps, I ought to say that in speaking somewhat slightly of the statistics of these operations, I have no idea of making any reflection on the trustworthiness of the narrators or on the truthfulness of the facts.

Another surgical subject, even more important than that of hernia (but I confess far more difficult to investigate) is syphilis. Of the

benefit to mankind, which may result from successful researches on this subject—a subject, be it remembered, very far indeed from being exhausted—we have a striking instance in Mr. Hutchinson's discovery of the connection between interstitial keratitis and congenital syphilis, and the curability of the eye-disease by iodide of potassium and mercury. Thousands of persons owe their vision to this happy discovery, who would otherwise have been practically, if not totally, blind. It is a discovery which no one questions, and which, in fact, is susceptible of the most rigid proof, as far at least as the curability of the disease by anti-syphilitic remedies goes. Should I be too presumptuous if I say that there is not the same certainty in respect of the connection of what are often called "Hutchinson's teeth" with congenital syphilis? At any rate I think I may go so far as to assert that if congenital syphilitic stomatitis does produce any characteristic irregularity of the permanent teeth, there are other cases in which a very similar irregularity seems to have been caused by other affections; and the various affections of the mouth and teeth in infancy, together with their effects on the permanent teeth, would form a subject worth any one's labour, and one for which adequate material could scarcely be found elsewhere than in the out-patient rooms of hospitals like these. But, apart from the teeth, how many unsettled questions connected with infantile syphilis, congenital and acquired, offer themselves to the student of children's diseases? It is a very short time since a distinguished French pathologist wished to convince the world that rickets is nothing else than a form of congenital syphilis. This doctrine is now, I believe, universally regarded as erroneous, but much still remains to be done in tracing the connection between many of the bone-diseases of childhood and syphilis, although you know, gentlemen, as well as all the rest of the medical world, how much has already been achieved in this department of medicine by officers of this hospital, Dr. Barlow and Dr. Lees. You may judge of the wealth of material which is to be found in this hospital, by the fact that 218 cases among the out-patients in 1885 are classed as "syphilis," and these are, of course, by no means the only cases which would bear on the subject.

I must not weary you by endeavouring to go over all the particulars in which the surgery of childhood differs from that which we are accustomed to see in the adult. But I should like to mention one most important branch of surgery, of which you see little in general hospitals, while here there is a wide field for its study. I mean malformations. In this term I include those congenital tumours of which I saw a large number of every variety when I was surgeon here, but of which few have come under my notice since. Such tumours are of the most various kinds, and their behaviour is equally various. Some,—but very few indeed—are, I believe, cancerous. Some grow with frightful rapidity, but are perfectly innocent, and, if removed entirely, will never recur. I once saw a striking instance of this. A little puny infant (*Path. Trans.*, vol. xiv) was brought to me in the out-patient room at St. George's Hospital, with a large congenital tumour of the orbit, growing so rapidly that it had pushed the eye out of the baby's head, and its shrivelled remains lay on the top of the tumour. The child seemed at the point of death from exhaustion caused by the discharge and the rapidly growing mass. Still, I had seen enough of congenital tumours at this Hospital to feel sure that it was in itself innocent, and that, if the operation did not prove fatal, the child had a fair chance of permanent health. I explained the case to the mother, saying that I feared the child would die on the table; but if she wished we would give it the only chance for life. She urged that it should be done. The shock of the operation was all but fatal; but by the sedulous use of the galvanic battery, warmth to the extremities, and artificial respiration, in about an hour we were able to give the child back to the mother; and I saw the child a considerable time afterwards perfectly healthy and thriving. When growing rapidly, such tumours should be removed, even in the earliest period of life. I operated, in this hospital, on a large one in the nape of the neck at the age of fourteen days, and with success (*Path. Trans.*, vol. xii). Cases like these are sufficiently rare to be unfamiliar to the general practitioner; yet, in some instances, like the above, vigorous action is required to save life, while, in others, there is no motive whatever for hurry, or even if the growth is in a concealed and not inconvenient locality for any interference at all; and, again, in other cases, much the same appearance is presented by mere congenital "sclerosis," as it is called, of muscles (common in the sterno-mastoid) which, I believe, usually disappears of itself.

In the true malformations, such as hare-lip, fissured palate, imperforate anus, much progress has been made of late years. One of the earliest workers on the subject of fissured palate was the first surgeon to this hospital, my friend and teacher, Mr. Pollock; and surgery is greatly indebted to him for the promotion and development of the

¹ In the annual report for 1885 it is stated that 190 cases of hernia presented themselves in the out-patient-room during the year, 116 being infants under a year old.

operation. It was during my period as surgeon to this hospital that Mr. T. Smith, then assistant-surgeon, introduced his happy modification of staphyloraphy by the invention of the gag which goes by his name, so that the operation could be performed under chloroform, and it was no longer necessary to wait till the patient became old enough to assist the surgeon. Like all other improvements, these became the starting-points of others, and the operation is now far simpler and far more successful than it was when I was young. I hope that I may say the same with respect to the group of malformations included under the general name of "imperforate anus." It is not so very long ago since all children born with imperforate anus were abandoned indiscriminately to death by many surgeons; but we now know that it is only a very small minority who are absolutely not viable, and that even the most formidable cases—those in which the lower bowel is actually absent—are not altogether without hope of surgical relief; while there are a large proportion where the rectum comes very near the surface or opens into the vagina, in which entire success can be obtained, and the patient restored to complete health and vigour. I was much interested a few weeks since in examining a woman who, when a little girl, was a patient of mine at this hospital, and on whom, here and at St. George's Hospital, I operated several times for the relief of a distressing deformity caused by the rectum opening freely into the vagina. When she first came under treatment, in early childhood, the small size of the parts, and the free communication between the rectum and vagina, caused very great difficulty in effecting a complete separation between the two tubes; and, after this was at length secured, it seemed at first as if there was no retentive power in the bowel. But this was at length acquired; and, when I last saw her, the parts were in all respects natural, and she was perfectly fit for all the functions of a wife or mother. I mention this case because it was a very difficult, and apparently, at first, a very unsuccessful one; and because it shows how completely the rectum may acquire the power of retention even in the absence of the regular sphincter; and also because it gives me an opportunity of recording my opinion that even at the present day we are not sufficiently active in our treatment of imperforate anus. Early operation, judiciously devised, would, I believe, restore many infants to health who are now allowed to die.

I trust that the few examples which I have selected from the specialities of children's surgery have been enough to convince you of the advantage you may derive in your future professional life from a diligent course of surgical study at this hospital. And there is another consideration, which must increase the interest with which surgeons regard practice on children, namely, the immense amount of good which is done in successful cases. It appears to me a very mistaken view of children's surgical diseases, which attributes them, in any larger measure, to ineradicable constitutional proclivities. I well remember when the operation of excision of the hip was first introduced, a common argument against its use was, "What is the good of removing the diseased joint, allowing that to be possible, while it is clearly impossible to remove the strumous constitution on which the disease depends?" Now I venture to say that very few indeed of these chronic joint diseases depend on a constitutional diathesis, though, no doubt, they are common in strumous children, and are more obstinate in them. But there is no doubt that a large proportion are the result of injury acting on a perfectly healthy constitution, and there can be no doubt that the removal of the diseased joint is followed by complete and permanent recovery. The days of my surgical service at this hospital are now remote, and most of my former patients have passed out of my observation, but I constantly meet with individuals on whom I operated here from twenty to twenty-five years ago, and who are still in good health; and I may say that cases of this kind are further useful in negating the idea which has prevailed rather extensively in the case of the elbow, and, to a great extent, also, in that of the knee, that such operations inflict some unexplained general shock on the limb, and are followed by a general wasting and loss of power. The reverse is certainly the case in successful excisions. The limb gains in power and utility, and, if the patient was quite young at the time of the operation, he will probably soon use it almost as nimbly as the other, and with almost as much strength.

But the chief advantages of study in this hospital are to be found in a field which I am not competent to survey; and while I should fail in my duty if I did not point out to you how much there is to be learned in children's surgery, my address would be still more inadequate if it did not conclude by telling you that all this is but a trifle compared with the paramount necessity, for one who is to become a general practitioner, of familiarising himself with the medical affections of childhood and with their treatment, while he has the unequalled opportunity which this hospital presents to him.

I declare to you seriously that if I had a son who was entering into general practice, I would not permit him to do so without having made a special study of children's diseases any more than of those of women. For the latter, it is unnecessary to go beyond the walls of the hospital to which the student is attached. There is, I believe, a department for the study of women's diseases in every hospital to which a medical school is attached. But at none of the general hospitals is there, nor can there be, an efficient department of children's diseases. Even special children's wards are hardly compatible with the due and economic working of a general hospital—at least, that was the conclusion to which the authorities at St. George's came after a patient trial of the experiment many years ago. Hence the liberal and self-sacrificing offer of the physicians and surgeons of this noble institution to place the rich stores of their experience, and the abundant materials of their daily practice, at the service of the students of our London hospitals, is one which cannot be too highly appreciated. I am glad to see from Dr. Cheadle's speech at the last annual dinner that the lectures during last year were well attended, and that as many as 234 visits were paid by students to the hospital. I hope that the liberal invitation of the staff will, in this and future years, meet with the response it deserves, not less for the sake of the students who will acquire knowledge inexpressibly valuable to them hereafter, than for the sake of the many patients who will benefit by the knowledge so acquired.

With repeated good wishes for the success of the Hospital, and for your success in your studies here, I bid you very heartily farewell.

THE VALUE OF DISINFECTANTS,

Being part of an Address delivered at a Combined Meeting of the Cambridge, Huntingdon, and East Anglian Branches of the British Medical Association, at Ipswich, on Friday, July 9th, 1886,

By WILLIAM ALFRED ELLISTON, M.D.,

Surgeon to the East Suffolk and Ipswich Hospital; President of the East Anglian Branch.

IN association with the management, treatment, and control of infectious diseases, the value of disinfectants is of great practical importance. We all know that disinfection, as ordinarily practised, is little more than deodorisation, or the substitution of a fresh odour, oftentimes unpleasant in itself.

I do not wish to detract from the value of many well-known so-called disinfectants, but their virtues are clearly more prized by the public than by the profession. The public faith in some latent power, which is to purify the sick chamber without free admission of fresh currents of air, should be shaken to its core. The great secret of successful nursing is cleanliness and ventilation, and it is possible to secure these without disinfectants at all, provided there be an abundant supply of clean bed- and body-linen. Nevertheless, properly selected disinfectants are valuable assistants in the preservation of cleanliness and sweet air, but they should be understood and appreciated at their real value, and not with an ignorant belief in their fetish power.

Professor Koch has related in the *Fractitioner*, of November, 1882, some important experiments bearing upon the reliability of disinfectants. He put the ordinary ones to the test in three ways. First to ascertain whether a particular disinfectant is capable of destroying the resting spores of bacilli, which are the most difficult of all forms of life to destroy. No disinfectant can be safely trusted which cannot destroy the developing power of the resting spores. The resting spores of splenic fever were generally used. The second is to ascertain how the disinfectant behaves in regard to more easily destructive fungi, such as yeast, bacteria, bacilli, and micrococci; and thirdly, to ascertain if the disinfectant is capable of arresting the development of micro-organisms in suitable nutritive fluids.

Carbolic acid, in a 5 per cent. solution, only sufficed to arrest the developments of spores after two days, while a 1 per cent. solution was sufficient to destroy, in two minutes, the bacilli themselves. A solution of 1 in 850 sufficed to check the development of the latter. The fact was very noticeable that carbolic acid in oil, or in alcoholic