PRESIDENT'S ADDRESS,

DELIVERED AT THE

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GENTLEMEN,—My first duty on rising to address you, is the paramount one of thanking you, in the warmest terms at my command, for the honour you have conferred upon me, in electing me to preside over our meetings during the year we are now commencing—an honour which, believe me, I esteem the greater, when I bring to my remembrance the distinguished and eminent gentlemen who have preceded me, and when, on looking round, I see so many amongst you who are far more capable than I of fulfilling the duties pertaining to the occupant of this chair.

You will accept, I am sure, my thankful acknowledgment of your favour, and will extend your generosity to the pardon of my shortcomings. My second duty is the pleasurable one of offering you all a hearty welcome, once again, to an annual gathering in the Leeds School of Medicine, where so many pleasant and profitable meetings have previously been held; and, in doing so, I would take the opportunity of inviting all who have not visited the wards of our infirmary, to spend the interval between leaving this room and our reunion at another place, in inspecting the interesting series of cases collected specially for the purposes of this day. And yet another duty, alas! remains to me—less easily performed—namely, to select some subject upon which I can make it worth your while to dwell with me, during the few minutes I am permitted to occupy before we proceed with the more important work before us—not that there is any lack of material to interest us. Periodical gatherings such as this, indeed, suggest—naturally suggest—innumerable topics upon which we may well confer together; afford us the means, if we are so disposed, of indulging our idiosyncrasies, and offer to your presidents at least—who, by virtue of their office, are relieved from the terrors of open criticism—opportunities of launching their wildest projects. I cannot plead a poverty of material for an address. Whether we look back upon the past, survey the field around us, or cast our eyes ahead, the scene teems with objects to arrest our attention, and we are embarrassed by the very multiplicity of subjects, each worthy our most earnest consideration. My difficulty is one of selection. A progressive science like that we profess, in an age which is specially characterised by activity and energy, presents so many points of simultaneous growth, that the most indefatigable amongst us would fail in an attempt to do more than appropriate a mere fraction of accumulated results.

When I look back but a few years and see what changes have been wrought even in that single branch of our profession which has claimed from me a closer observation than any other—I mean practical surgery—I am confronted with a series of achievements which is really surprising. A comparison of an average week's work in the infirmary across the way, with a record of what was accomplished during a like period ten years ago, has suggested to me that I might ask you to consider with me a few of those improvements in surgery which have been effected during recent years; for it would be impossible, within the limits of your patience, to allude even in the most cursory manner to all the advances—substantial advances—which we have appropriated for the benefit of our patients during a much shorter period than the decade last completed. I will confine myself strictly to those which are of most recent date, and of which I have personal experience: to a brief summary of the latest surgery practised at Leeds.

At the very onset, I am struck with the intimate connection between these advances and the antiseptic method of treating wounds; but as it is now considerably more than ten years since Mr. Lister impelled the profession to recognise how much our efforts are thwarted by the putrefactive agencies around us, and demonstrated how certainly their baneful effects may in many cases be counteracted, it would be outside my present purpose to enter into the consideration of the merits of antiseptic surgery. Suffice it to say, that it has gradually become the established practice here in Leeds, and that it has now almost supplanted all the older methods known to our predecessors. I feel, indeed, that there is no longer need to defend Listerism. The boldness of the man who in this day would dare to deny or even doubt its power for good, partakes more of rashness than of prudence. See how confidently the surgeon proceeds, under its protecting influence, to

separate or divide the various structures of the body; to make sections through bone producing the worst forms of compound fracture, without fear of the result; to open up cavities and joints, and even to expose the various viscera to his inspection.

Antiseptic surgery has become an established institution. In making mention of it at all, indeed, I only desire to accentuate the invaluable part it has played in leading up to many of the modern surgical improvements. There are few instances of more complete change of practice than is to be observed in our present, as compared with our former mode of dealing with cancers in their various forms and situations. Not long ago a scirrhus breast was deemed unfit for removal on grounds we should think wholly insufficient now. An extensive infiltration of the gland itself, an implication of the pectoral muscle beneath, giving rise to a feeling of attachment to the ribs, the extension of the disease to the axillary lymphatics, and a portion to those beneath the pectorals or above the clavicle, were held to debar us from operative interference. The verdict "too late" was pronounced upon all but the most limited. During recent years we have gradually extended our operations, until now I should not be far wrong if I said that our rule is to remove in all cases in which an entire extirpation of the disease is practicable, with fair prospect of recovery and of ultimate closure of the wound. And so with return growths. Whilst formerly it was held that a reappearance of the disease after removal—surely indicating an ineradicable constitutional taint—prohibited all further operative measures, our practice now is to apply the same rule to these as to the primary disease—to remove, viz., where possible. As an instance of the extent to which, with antiseptic precautions, we may pursue a cancerous infiltration, I may mention the case of a hospital patient from whom I had previously removed the scirrhus mamma, and who had now returned with such a fulness between the clavicle and the deeply indented scar, as to lead me to explore for secondary disease. On opening up the axillary and sub-pectoral spaces, I found them to be literally filled with adherent and infiltrating masses of growth, as is frequently the case, out of all proportion to the pre-existing signs. For their extirpation prolonged tearing and dissection were needed, during the course of which, first of all the pleural cavity was distinctly laid open, and subsequently the axillary artery, which had been imbedded, and, perhaps, displaced, was completely torn across, and yet, with all this, the woman was able to leave the hospital within three weeks, her wound soundly healed, and herself none the worse apparently for the dangers through which she had passed. And again, as illustrating the advantages to be gained by perseverance in the removal of recurrent growths, I may select the case of a lady—a patient under the joint care of Mr. Halliday of this town and myself—who, after having during twelve consecutive months undergone no fewer than six separate operations (including the original amputation of the breast), for the removal of cancerous nodules affecting the cicatrix, the surrounding skin and subjacent tissues and the axillary lymphatics, passed upwards of two years of uselessness in the enjoyment of good health, now again exerting herself beyond the average of women; and then died, without any sign of outward disease, from an acute thoracic affection of short duration.

A similar change of practice, too, is now pursued in dealing with cancerous disease in other situations. In epithelioma of the face, involving a large extent of surface, the bones and deeper structures, we remove widely and unsparingly, filling up the unsightly gap by transplanted pieces of adjacent skin. In cancer of the penis, we no longer feel bound to accept, as a valid reason for refusing to operate, the inconvenience of having a meatus flush with the pubes, from whose orifice the urine dribbles over and excoriates the scrotal integuments. On the contrary, we now pursue the disease even to the removal of the entire organ, including its crura and the subscrotal corpus spongiosum, as well as its associated inguinal lymphatics, diverting the urethra from its normal course to an outlet in the perineum.

Of the removal of laryngeal, of pyloric and intestine, and of uterine cancers, the collective experience is not yet large enough to warrant me in including them in the category of accepted surgery. The mere mention of them, however, will serve to show the direction in which the surgical world is working—to emphasise the opinion now rapidly gaining ground, in favour of the early and the complete removal of cancerous growths, wherever it is found to be practicable.

It will not be deemed foreign to this subject, if I allude to two important measures for the relief of cancerous patients, one of which, indeed—I mean colotomy in cancer of the rectum—can only be considered amongst recent improvements, in the sense that it is but now becoming the practice to resort to it in cases where obstruction has not yet supervened; the other, gastrotomy—a proceeding which bids fair, both to add materially to the duration of life, and to substitute a more merciful death for that of starvation, with its prolonged hunger and thirst, in

patients afflicted with oesophageal cancer—operations having common aims: to put, viz., the affected organ in a state of rest; to place it, in fact, in the position of an external instead of an internal organ essential to life.

Left lumbar colotomy, though a severe measure if resorted to when the patient is in a state of extreme exhaustion following upon prolonged obstruction of the bowel, is found to be comparatively free from danger when performed under more favourable circumstances. Latterly, we have been in the habit of opening the colon for the purpose of diverting the fæces from the diseased channel, in every case of cancerous rectum, where the sufferings of the patient have been of sufficient severity as in themselves to increase the dangers to life—whether those sufferings have arisen from the defæcation attendant upon a gradually encroaching growth, or from the teasing dysenteric tenesmus which characterises the ulcerative form of disease. And I am disposed myself to think that it would be sound practice to make an artificial anus in every case of cancer of the rectum, as soon as the diagnosis shall be complete, without waiting for those distressing symptoms which must, sooner or later, inevitably arise, and the extreme presence of which has hitherto been deemed essential to the legitimate performance of the operation. For it cannot be questioned that the contact of offensive material such as fæces, together with the frequent injury of necessity resulting from its passage through the diseased gut—injury which is surely indicated by the discharge of blood and mucus—must have the effect, not only of adding directly to the patient's distress, but also of increasing the rapidity of the tumour's growth. With the twofold object, then, of retarding the infiltrating and ulcerative processes, and of avoiding altogether the onset of the obstructive symptoms on the one hand, or of the diarrhoeic distress on the other, I would advocate the early resort to Callisen's operation in the loin.

Remarks of a similar kind would apply, with at least equal force, to the lately projected operation of gastrostomy, especially those having reference to the early resort to the operation. For, if the artificial opening into the stomach be delayed until the oesophageal constriction is complete, not only will the patient's strength have become so far spent as materially to lessen his chances of recovery, but it will possibly be found—as actually occurred on a recent occasion to myself—that the stomach, owing to the lengthened absence of food, has shrunk from its normal contact with the abdominal wall, and disappeared beneath the arch of the diaphragm. When undertaken in suitable cases, like early colotomy, gastrostomy may doubtless be classed amongst recent substantial improvements.

I am wandering somewhat, I find, from my intention of merely recording in brief a few of the more prominent amongst the recent additions to the art of surgery. It is difficult to withhold one's own impressions and experiences; but I must pass on rapidly to enumerate a few other, if less important, still interesting illustrations of our onward march.

Chiefly through the example of two Scotch surgeons—Macewen of Glasgow and Ogston of Aberdeen—the section of bones for the rectification of deformities resulting from defective nutrition in early youth forms a prominent feature in every operating-theatre. The pressure of mechanical appliances, aided by the division of tendons, were the only and often inefficient means made use of for the straightening of rickety curves and knock-knees, until Ogston, emboldened, doubtless, by a well-founded confidence in the power of Listerism to prevent the occurrence of putrefactive inflammation, devised the plan of treating cases of genu valgum which is now known by his name, and which consists of sawing off the inner condyle of the femur, and displacing the detached portions of bones upwards to such an extent as to restore the normal plane of the articular surface; and Macewen, followed by Reeves, Barwell, and others, applied the same fearless principle of free open antiseptic section of bones—using chisel and mallet or saw with the greatest freedom—for the rectification of curved bones and distorted joints.

It was thought a bold stroke on the part of William Adams when, twelve years ago, he announced that he had divided the neck of the femur by subcutaneous sawing for the restoration of a limb in a case of vicious ankylosis at the hip-joint; and I well remember with what misgivings as to possible consequences I proceeded to undertake the second example of this now established operation. We need only call to mind the fierce contention between two rival London medical schools for the honour of having been the first to demonstrate that it was possible to make a complete section of the neck of the thigh-bone without endangering the patient's life, to realise how substantial an advance has been made in osteotomy since Adams's important discovery. In the days of festering wounds, when phagedæna (of which I hardly ever see an example now) was a perennial visitor in our wards, when pyæmia and septicæmia marred the statistics of all our hospitals, the

risks involved in the presence of a wound communicating with injured bone were so terrible as to forbid the surgeon from voluntarily inflicting a compound fracture to obtain a merely æsthetic result. It may fairly be reckoned, I think, an enormous gain, that, with perfect confidence, engendered by the certain foreknowledge of a favourable issue, we proceed, at intervals of a few weeks only, deliberately to cut down upon, and even remove wedges from, the thigh and leg bones, in as many as six or eight different spots in the same individual.

Somewhat akin to this subject of osteotomy, is the plan we are now pursuing in the treatment of fractured patella, for the purpose of procuring direct, and, under the most favourable circumstances, bony union. How unsatisfactory in their results are the ordinary methods of treating recent simple transverse fractures of the patella, is testified by the great variety of appliances recommended, and made use of; the many special splints and inclined planes, the bandages and plasters, the hooks and steel pins, as well as by the permanent limp, the changed employment, the never-to-be-cast-off knee-cap, and the disunited fragments. Encouraged by the success which followed upon the close wiring together of the exposed fragments in a series of remarkable cases of compound fracture of the bone, as well by the excellent result obtained by Mr. Wheelhouse in a hospital patient, who was incapacitated for work by reason of the wide separation of the two halves of his patella. I have undertaken the responsibility of adopting a similar course in a case of recent fracture, and the result may now be seen amongst the patients on exhibition at the infirmary, in the comparatively slight alteration in the size and shape of the bone, and in the entire absence of movement at the seat of fracture; and it may be claimed as a distinct advantage over other plans of treatment that, through the incision made for the exposure of the fractured surfaces, all blood and other effusions capable of impairing the future movements of the joint may be effectually removed. Did time permit, I should like to dwell upon the freedom with which joints are now opened, upon the removal of loose cartilages by means of direct incisions, upon the laying open of capsule and synovial cavity for the cutting short of inflammatory disease, and for the relief of pain, when tense with purulent effusion; and upon the scraping or clipping away of the various products of slow disease. I might remind you of all that has been accomplished in the way of restoring paralysed limbs by the re-union of long since divided nerves, of the help demanded of us by the physician in his treatment of obstinate neuralgia, in the shape of stretching, dividing, or dissecting out of the implicated nerve, and of the excellent results that may be obtained from the direct union, by suture, of tendons divided by accident, or by the surgeon himself. The operations again of nephrotomy and nephrectomy—the cutting into and the extirpation of the kidney—may be claimed as belonging to the period we are reviewing; and of these we have had several excellent examples in Leeds. One single case of extirpation, though one of the first to succeed in this country, has not enamoured me of the operation, but has led me rather to look upon it as a feat of dexterity and daring, than as likely to lessen appreciably the sum of human suffering. In nephrotomy, on the other hand, we possess a means of relief, not difficult of application, which may be resorted to in varying conditions, with feelings of safety, and prospect of benefiting our patients. I know indeed of no single occurrence in the course of my practice, upon which I can look back with greater pleasure than I do upon the case of a hospital female patient, whose kidney I incised under such unusual circumstances that I may be pardoned for briefly alluding to it. Purulent urine was being painfully squirted, every few minutes, from an intolerant bladder. Physical examination of the patient's abdomen, loins, and pelvis; chemical and microscopic examination of the urine revealed no more than the single fact of purulent urine. In the hope of relieving her most distressing symptoms, I resorted to the operation, for which we are indebted to Mr. Teale, of dilating the neck of the bladder; and when, in its completion, the forefinger was swept round the interior of the viscus, I was struck by the fact that the left ureter could be felt in the wall of the bladder as prominent and as firm as a piece of whipcord, whilst the orifice of the right could with difficulty be made out. Immediately, it became clear that the mischief was seated in the left kidney, and with perfect confidence the steps for nephrotomy were taken; the kidney was exposed in the loin, its substance was incised, and from its pelvis there exuded from two to three ounces of offensive pus, the evacuation of which, as the event as shown, proved to be the initial step in an uninterrupted recovery.

By the consideration of renal operations, we are naturally reminded of many other important additions to the surgery of the abdomen; of the perfection to which ovariectomy has been brought, of hysterectomy, of oophorectomy, and of exploratory operations in abdominal obstructions. But I must not detain you longer. Imperfect as my attempt has been to place before you some of the more striking achievements

by our fellow workers, I have said sufficient, I hope, to demonstrate the existence of much remaining vitality in the world of surgery, and to justify the promise of still further triumphs to some.

BILHARZIA HÆMATOBIA IN CONNECTION WITH A FORM OF DYSENTERY IN EGYPT. . .

By JAMES MACKIE, M.B.,

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FROM what has lately been written on the subject of *Bilharzia* in connection with our expeditionary force to Egypt, one might be led to infer that *Bilharzia hamatobia* and endemic Egyptian hæmaturia are almost interchangeable terms, and that the one never exists without the other. This, in the great majority of cases, is true; but, it does not seem to have received the attention it deserves, that persons may suffer severely from the parasite without showing any symptom of hæmaturia or other urinary disorder. Many cases of supposed dysentery and severe internal hæmorrhoidal affections are caused by the presence of, and irritation caused by, multitudes of the ova of *Bilharzia hamatobia* imbedded in the walls of the rectum; and to this I wish to draw attention, as being of interest in relation to chronic dysenteric affections which may present themselves amongst our troops remaining long in the country. Many natives from the interior of Egypt present themselves for advice in our out-patient department at the Deaconesses' Hospital, complaining sometimes of "piles", sometimes of "dysentery", sometimes of "constant pain and weight in the rectum with tenesmus". Whatever name they may give to their complaint when asked what it is, they all complain pretty much of the same symptoms—viz., straining at stool, constant weight and discomfort, perhaps pain about the rectum, constant or frequent desire to go to stool, and passing only a little mucus and blood, pain at hypogastrium, emaciation, etc., having generally been ill for months before they apply. If closely inquired into, those cases hardly present a history of ordinary dysentery or hæmorrhoids; there is a something in the history more nearly resembling a mild form of malignant disease; but the history of the case can only be got from a native by those knowing their language and accustomed to examine them. To clear up the diagnosis: if the forefinger is introduced well up into the rectum—and it generally requires to be pushed up as far as it can reach—small, soft, but firm nodules will be felt, generally about the size of a small bean, often very numerous, and giving the impression to the feel of a small, well-defined sessile pile, but too high up for piles, and not hard enough for malignant disease. By introducing carefully along the finger a small hæmorrhoidal forceps, one of these small tumours can easily be twisted off for examination under the microscope, when its blood-vessels will be found to be filled with the ova of *Bilharzia hamatobia*; and in my own experience the ova found in the rectum have in nearly all cases the spike placed laterally, differing from those generally found in the urine, which have the spike at the extremity. The presence of *Bilharzia hamatobia* may be manifested by dysenteric symptoms, as I have already mentioned, without the patient ever having shown any sign of urinary disorder, or any ova being found in the urine after repeated and careful microscopic examinations.

One case, which was under my care last winter in the Deaconesses' Hospital, impressed me very much at the time—happening to be under treatment when a correspondence was going on between me and the directors of the Eastern Telegraph Company in Egypt, and the directors and Dr. Cobbold in London, regarding a number of cases of hæmaturia amongst the company's staff at Suez, which has already been referred to in the *Times* war correspondence, and lately by Dr. Cobbold in the *BRITISH MEDICAL JOURNAL* and elsewhere. Acting on advice in London, the directors of the company suggested that the urine of all the employees should be sent to me for examination from time to time, in order to detect the presence of the parasite as early as possible. In a letter to the company, I pointed out that the disease often existed without any evidence of it to be found in the urine. I instanced the case of the patient, an Arab above referred to, who happened to be under observation. The urine of this man was carefully and repeatedly examined for me by Dr. Murison, a most careful and accurate observer, by Dr. Vernoni, and by myself. We took every care to examine the last drop drawn from the bladder; we even irritated the bladder by the catheter to obtain a little blood; we never found a single ovum from the bladder, while his rectum was full of small tumours, each of which was crowded with ova. The man's sufferings were great, and state bad. He seemed to be, as I described it, infested with bilharzia, and never had had a symptom of any urinary disorder, according to his own statement, which I can confirm from observation while in hospital.

In all cases of what may be termed subacute chronic dysentery in people who have been some time resident in Egypt, and exposed to drinking unfiltered water, the rectum should be carefully examined by the finger pushed up as high as possible; and if small tumours, such as I have described, are found, they should be examined under the microscope.

THE EFFICACY OF VACCINATION.

By J. HIGHAM HILL, M.D., F.R.C.S.E.,

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DURING the late outbreak of small-pox in Sydney I had many very favourable opportunities of witnessing the great efficacy of vaccination as a prophylactic against that disease; and as in some respects the experience was remarkable, I hope that I shall not be considered a slayer of the slain in writing to bear additional testimony to such a well recognised fact. I think it will be generally conceded that, while sceptics of the efficacy of vaccination and antivaccination agitators exist, it is well that practitioners who have had special opportunities of personally observing that efficacy should place upon record their convictions on this important subject, together with some of the facts upon which they are founded.

In the first place, vaccination not being compulsory in the colony of New South Wales, there was a large amount of unprotected material in the shape of unvaccinated people, adults and children, for the disease to prey upon; and a feeling amounting almost to panic on its sudden and unexpected appearance in Sydney in June of last year.

Secondly. The measures adopted by the Government to prevent the spreading of the disease were unusual, and apart from the question of their intrinsic value, afforded peculiarly good opportunities of testing the protective influence of vaccination.

On a suspected case of small-pox being reported to the authorities, the house was at once visited by a member of the Government Medical Staff, specially appointed; and if, on examination of the individual, the suspicion proved well founded, the house and its inmates were immediately placed in a state of strict quarantine, and no unauthorised person allowed to leave it; special police arrangements having been made to enable this to be done under the Colonial Quarantine Act. If the affected person could not or would not be removed to hospital, as was frequently the case, the other inmates were in very many instances kept in the same house, there being often no accommodation for them in the "sanitary camp", which was erected some miles out of town near Botany Bay. The patient was isolated as much as possible, but the isolation which could be effected in small or overcrowded houses was practically nominal. Under such circumstances, the protection of the unaffected inmates and neighbours by prophylactic means was a matter of the greatest importance, and to the credit of vaccination I can safely assert that results proved it to be a protector equal to the occasion—very few vaccinated inmates of quarantined houses contracting this most infectious disease, and those few having as a rule very mild, modified attacks, although all were greatly exposed to the infection while living under depressing influences and bad hygienic conditions, being confined in small houses, with little or no opportunity for obtaining fresh air, exercise, etc. Many nurses were employed, but none contracted the disease, all having been protected by previous attacks or efficient vaccination before commencing their duties. On the other hand, in every instance where anti-vaccination prejudices could not be overcome, and although small-pox was in their houses, persons would not be vaccinated, or allow their children to be vaccinated, severe, and very often fatal, attacks were the rule without exception; and, when too late, these persons bitterly bewailed their ignorance and stupidity.

I could mention many cases where only the unvaccinated members of households were picked out by the disease and attacked, the others leading, as it were, "charmed lives," although exposed freely to the infection, and, as I have stated, under bad hygienic conditions, thus testing, with unusual severity, the protective power of their vaccination. And as with households so with neighbourhoods, as the following instances taken from many will show.

A woman, living in a semi-detached wooden house, was attacked with small-pox of the severe confluent type. Neither she, nor her husband, nor her daughter, aged 16, the only occupants of the house, had been vaccinated. I vaccinated the two latter as soon as possible; the daughter escaped altogether, although acting as nurse to her mother. The husband had a very mild attack, consisting of only half-a-dozen modified variolous pustules on the face and hands, with very little constitutional disturbance, and no secondary fever. Next door was a