less it will result in the survival of the fittest; but one thing is quite beyond dispute, aspersions, epithets, sneers, and curses will break no bones, nor crush out the life, and it will, phoenix-like, survive the calumny and rise again from its ashes.

The best course to become a specialist in our profession is first to spend some years in general practice, and I know Sir Morell Mackenzie and others fully endorse this view. As for myself, I have become a specialist from accidental circumstances. I happened to be a pupil of that highly distinguished, eminent, and eloquent lecturer on surgery, Professor Pilcher, and although he did not include the subject of otology in his course, I was much associated with him generally, and had the good fortune and rare opportunity of seeing his practice in this speciality, and to some extent was led to study the branch of our science thereby.

Professor Pilcher was the author of the first philosophical scientific treatise in our language, and although he was treated by some of his less informed and much less cultivated contemporaries with contempt on the publication of his admirable book on *Diseases of the Ear*, still he was doubtless a pioneer on the subject, and from his investigation dated the rapid and scientific progress of the art, rescuing it from the trammels of quackery, and thereby throwing off the incubus under which it had laboured and suffered so long.

Pilcher was soon followed by Toynbee, who gave another fresh and great impetus to our specialism, and with whom I had the honour and privilege of being associated, succeeded by the great philosopher and good Christian, Hinton; and now, I am proud to state, we can boast of as many illustrious and distinguished fellow-labourers as exist in other branches of medicine or surgery. We have also opened to us now wide fields for observation and the cultivation of the subjects in our special hospitals, and in a short time every large general hospital will also doubtless possess its special branch of otology, laryngology, and rhinology.

An article in the *Provincial Medical Journal* to my mind put the matter very clearly in stating that "we must have specialists in medicine and surgery, just as we have specialists in other sciences. The law of supply and demand almost of itself settles the question, and the public also solves it. By some kind of natural selection men take up the study of some form of disease, and a reputation for skill in this special form is secured. The general practitioners give an endorsement to some claims; for instance, for nervous diseases the general practitioner will recommend a specialist eminent in these diseases, and this form of recognition is the highest and the best—he makes the specialist and encourages him.

"In every city and town we have physicians and surgeons who stand out from their fellows as distinguished in a special branch of medicine or surgery; their brother practitioners recognise them and call them into consultation, but of course we must *differentiate* and separate the wheat from the chaff, as there are specialists and specialists." In conclusion, I should like to venture upon a few words on the question of the multiplication of sections in our British Medical Conference meetings. I feel, and I think most of you will agree with me, that the number of divisions has now almost reached its legitimate limit, but there may be just one more which I have always considered would be allowable, excusable, and even desirable; it is that of orthopædic and spinal surgery, a branch which requires much special and technical skill, especially in carrying out its details of after-treatment, which are certainly special, and require much special experience and manipulative tact. It appears a simple matter to divide a tendon subcutaneously, and that it would not be possible to mistake a tendon for any other structure, but I have seen extraordinary surgical operations performed in these special cases by men who are in every respect very high-class general surgical operators. I have seen osteotomy done also in a way that I should not consider quite successful, by the ordinary hospital surgeon.

"Practice makes perfect," and it is the constant performance of these very delicate operations which enables one surgeon to excel another in any particular department.

If this be questioned or doubted you have only to attend and observe the skill and beauty of those operations in abdominal surgery, performed by the distinguished specialists of that region, and I am sure you will soon be convinced that familiarity and dexterity are only to be acquired by daily work in that department.

Has not most of the scientific progress in surgery arisen from the specialist? I will not claim all, but the advancement generally has been achieved and matured and perfected by those chiefly who have devoted their special attention to special subjects.

I am quite of opinion that a section for orthopædic and spinal surgery would be legitimate and justifiable.

CLASSIFICATION OF VESICAL TUMOURS.¹

By SIR HENRY THOMPSON, F.R.C.S.,

Surgeon Extraordinary to His Majesty the King of the Belgians; Consulting Surgeon to University College Hospital.

THE classification presented here is founded to a considerable extent on my own experience of the forty-one cases operated on and now reported, each tumour having been examined by a competent pathologist; but besides observing several other cases in consultation, as well as taking the supervision of some in which, for various reasons, no surgical procedure was admissible, I have made a study of numerous preparations in the London museums. From these sources chiefly the following varieties of vesical tumour are enumerated and classified, commencing with the most simple.

1. The mucous polypus—which is not to be confounded with prostatic outgrowths of similar form, these being inadmissible in any scheme comprising vesical tumours—resembles polypi of the nasal cavity, but is more compact and solid in structure. Hitherto, this product has been found in young children only.

2. Papilloma. The papillomatous growths appear in two forms, the essential character being that the structure of the characteristic portion always resembles that of the natural papillæ occurring in certain parts of the digestive canal. The constituent element consists of a prominent fold of simple membrane, supported by connective tissue containing a large arterial twig as a central axis, while the outer surface of the membrane is closely covered by a layer of cylindrical epithelium, or, much less commonly, by the ovate or spherical variety. Formerly these growths were called "villous," to which it was usual to add the term "cancer," although the implied allegation was entirely unwarranted by evidence. When these prolongations are very long, slender, and floating in the bladder, the papillomatous growth is termed "fimbriated." When a considerable portion of fibrous tissue is present, rendering the growth more solid, the designation "fibro-papilloma" is more appropriate. These growths form very slowly at first, but when developed give rise to repeated attacks of hæmorrhage, which in time become continuous and copious, thus terminating life. They are the most commonly met with of all vesical growths, and their symptoms have been often mistaken for those of renal disease. Microscopic examination of the urine will sooner or later (especially if the bladder is washed out with water and the *débris* scrutinised) detect specimens of the growth, which are quite characteristic, and absolutely decisive that the growth is present.² Moreover, on careful inquiry, it may be ascertained that the bleeding is found occasionally, sometimes frequently, to appear in a manner which can rarely or never be met with in renal hæmorrhages. The patient commences an act of micturition with clear or almost bloodless urine, and at the end of the act bright florid blood is mixed with the stream, or appears alone at the close. This fact determined, the bleeding is without doubt vesical, and if for a considerable period of time there is still but little pain experienced, and the act of micturition is as a rule not very frequent, the bleeding is certainly not due to a sarcomatous or carcinomatous growth, and is therefore very probably significant of papilloma.

I may remark here that I know no styptics which appear to control the hæmorrhage from this source, although I have seen all the known remedies abundantly tried. Treatment by local injections is apt to provoke rather than check the flow of blood.

3. The simple myomatous tumours are not very uncommon; they are not accompanied by any characteristic signs of their presence, but have sometimes papillomatous growth on their surface. Nothing further remains to be said here in relation to diagnosis, except that their progress is slow, and the characters of malignant growth are absent.

¹ Read at the International Medical Congress, Berlin, August, 1890.

² Failing to discover it thus in cases in which the symptoms strongly indicated its presence, I have on two or three occasions introduced a light, flat-bladed lithotrite of small size, and by opening and closing it slowly a few times, have removed a tiny fragment which, under the microscope, afforded the desired evidence.

4. Tumours made up of fibrous tissue chiefly, more or less associated with small nuclei interspersed. Sometimes these are in large quantity, a fact which leads to a graver estimate of their character, as indicating that they probably possess a tendency to return after removal. Both these and the preceding kind involve the deep structures of the bladder, and cannot be entirely separated by any operative procedure; while, on the other hand, many examples of papilloma, especially when growing from a pedicle, may be completely removed, and often do not return.

5. Epithelioma, the nature and characters of which in the bladder are those of this growth in all other parts of the body.

6. Scirrhus, or "cancer" properly so called, not occurring until after the middle term of life has been reached, is occasionally met with in the bladder.

7. The round- and spindle-celled sarcomata, formerly known as "encephaloid," are sometimes met with in children, but affect not infrequently the adult also. There are three cases of these sarcomata in the series. One, No. 32, is at present unique as regards the bladder. The preparation was examined by one of our most practised and able pathologists, Mr. Shattock, Curator of the Museum of St. Thomas's Hospital, who reported on it as follows:—

"This tumour consists in part of perfectly formed cartilage, and in part of sarcoma tissue. The latter is of the spindle-celled and mixed kinds, and the process of its chondrification is readily traceable; the cells become surrounded by matrix, and by their subsequent multiplication and secondary capsular formation there is produced the characteristic structure of ordinary cartilage."

The diagnosis of malignant disease of the bladder is not difficult. Examination of the rectum furnishes valuable information. Scirrhus growth is very hard, irregular in form, and is thus unlike ordinary senile prostatic enlargement, that is, the so-called "hypertrophy" occurring in elderly men. The sarcomata are full and rounded in form, more elastic to the touch than "senile enlargement," and far more rapid in their rate of increase in size. Epithelioma, slow and restricted in growth, may exist several years before presenting a tumour sufficiently dense to be recognised by palpation or by sounding. In malignant disease pain is soon a more or less constant symptom, and some hæmorrhage is liable to appear, increasing at a later date; it is thus distinguished from papilloma, which is rarely recognisable by the rectum, or even by the sound, manifests its presence first by hæmorrhage, often at an early date, and is rarely painful until quite the later stage of its history. In all the three forms of recurring or malignant growths, microscopic observation may corroborate a diagnosis based on the signs and symptoms mentioned, but cannot by itself establish one.

I shall now offer a brief summary of the results of the operations which I undertook in these 41 cases, of which 34 occurred in male and seven in female patients.

I. In seven cases (Nos. 1, 20, 29, 31, 34, 36, and 38), there has been no reappearance of symptoms of any kind, three years having elapsed since the most recent, and nearly ten years since the first case of the series. All are living and well except No. 20, who met his death by accident some two years after, but the bladder was examined by his medical attendant after death, and sent up to the museum of University College Hospital, London, where it now is, together with the tumour originally removed; no trace of reappearance can be found in it. In every case but one the nature of the tumour was papilloma, the exceptional case, No. 20, being probably a myoma. In three cases the growth was removed by forceps through a perineal incision; in one female case, dilatation of the urethra sufficed; and in the three remaining cases by suprapubic operation.

II. In fifteen other cases death occurred at different periods, varying between three days and four months after the operation. Ten of these were the subjects of malignant growth of some kind, epithelioma and sarcoma in two or three varieties. Two were papilloma, apparently simple. The rest were myomatous, but containing nuclei which aroused suspicions of a grave character. It is worthy of remark that in five of this series papilloma was also present on the surface, and therefore probably as a secondary product to a more important growth, as myoma or sarcoma.

III. Nineteen patients remain, who lived after the operation for periods varying from about a year or a little less, up to four years, one of these being now in good health (two years after the opera-

tion), much stronger and stouter than before, but is just beginning to note the reappearance of a little blood, and is, therefore, not entitled to be regarded like the first class, or those in whom the recovery was permanent.

I think it will be admitted, as the result of all past experience, that the subject of a bleeding vesical tumour invariably dies of his disease more or less speedily, unless its removal is accomplished. Every instance, then, of operation which effects this and produces a permanent cure is a life absolutely gained by the surgical art. But when this is unhappily not to be accomplished, a partial removal has obviously prolonged life, and afforded an interval of renewed health and freedom from pain, etc., sometimes of great value to the patient.

Thus the foregoing results, although of necessity furnishing many instances of failure, demonstrate our power to offer invaluable aid to a certain proportion of otherwise fatal cases. For no individual case is it possible to predict the issue of an operation. Not until the scalpel has opened the way and permitted the operator to lay his finger on the growth, and thus ascertain its physical characters, can he say whether it can be completely removed; and when it is not possible to do this, the probability of return must be feared.

In all cases in which we can ascertain the presence of malignant disease—carcinoma, sarcoma, epithelioma—I am strongly of opinion that it is useless to attempt to remove the growth, and that such interference is liable to aggravate the sufferings of the patient rather than otherwise, and perhaps hasten his end.

Setting these cases aside, I am not less strongly of opinion that it must almost invariably be our duty to recommend an operation for removal, not only when the disease is obviously not malignant, but when there is any reasonable doubt on the subject, which will in the course of the operation be cleared up, and the procedure can then be limited or not, according to the judgment of the surgeon.

In relation to cases in which doubt may arise it must not be forgotten that papillomatous growth may be present as a secondary growth upon another form of tumour in the bladder, so that its presence among the *débris* examined does not demonstrate the presence of a simple uncomplicated papilloma. No doubt in a large majority of cases the simple growth alone is present, but the exceptional condition is not very rare. It is on this account that I often practise and advise a small perineal incision to be made in the median line, opening the urethra in the membranous portion, so that the surgeon may introduce his index finger into the neck of the bladder. This proceeding I have recommended and much practised during the last ten years in obscure cases, under the title of "Digital Exploration of the Bladder." When the patient is thoroughly under the influence of an anæsthetic firm suprapubic pressure enables the operator in all ordinary cases to determine with his finger the size and nature of the tumour. If it be a simple pedunculated growth, as papilloma often is, the introduction of an appropriate forceps will mostly suffice at once to remove it. If, on the contrary, it is found to be large, occupying a wide base, or is otherwise evidently unfitted for treatment by the simple proceeding referred to, the suprapubic operation can be at once performed in the usual way. This I have frequently done, and have never found that the preliminary incision described interferes in any way with the subsequent operation, which is conducted precisely as if no such "exploration" had taken place. When a large prostatic or other tumour is encountered in the rectum it is possible that the finger may not reach the bladder, and so may be incapable of exploring the cavity, but in these circumstances the "digital examination" is wholly unnecessary, the condition in question demonstrating that the case is not one of simple removable tumour, but is probably an example of malignant growth. But it may be said that the diagnosis of a vesical tumour may be readily established by means of the Leiter endoscope. I long ago tested its value, having employed not only the earlier but the latest and most improved form of that instrument. Let me say, first, that the employment of it in the cavity of the bladder involves much irritation in some cases, far more than that which follows the use of the sound. Secondly, that in presence of a tumour which the slightest mechanical contact causes to bleed the observation is mostly an imperfect one. Thirdly, that the instrument is rarely necessary to determine the fact of the tumour's presence, that being ascertainable in nine cases out of ten by the ordinary methods already alluded to. Lastly, it is assumed to furnish the means of ensuring

³ Described in the *Trans. of the Path. Soc. of London*, from which the above is an extract, vol. xxxviii, 1887, pp. 184.

a view of the growth which shall enable the operator to determine whether it is peduncular and easily removable, or the reverse. In regard to this important matter, I admit that the object may be attained, but in the majority of cases I am certain it cannot be thus decided, as when the tumour is not seen in profile and when the bleeding occasioned permits only an imperfect view, a far more accurate idea can be obtained by "digital exploration," which never produces the severe cystitis, becoming chronic and confirmed, which unhappily too often follows prolonged manipulation with a rigid cystoscope in the diseased bladder of an elderly patient. I have performed "digital exploration" upwards of a hundred times and have never met with any serious, far less fatal, issue to that simple operation.

Finally, supposing that by any process whatever the presence of a manifestly carcinomatous or sarcomatous growth has been discovered I can say nothing, as already indicated, in favour of operative measures for its removal. It is always possible to extirpate the growth, which largely involves the walls of the organ itself, and rapidly reappears after the attempt has been made, although large masses may have been taken away and an apparently almost empty cavity has been left as the result of the procedure.

The palliative treatment for all patients thus affected consists in the avoidance of habits, occupations, and any amount of exercise found by the experience of each individual case to produce serious increase of hæmorrhage; the maintenance of the digestive power and healthy activity of the functions which support life is as far as possible to be ensured; and lastly, the adoption of all means, especially towards the closing stage of a case which is certainly destined to be fatal, in order to alleviate suffering which is usually severe and prolonged, unless dealt with unflinchingly, as it ought to be in such painful circumstances. The ample use of morphine, usually most effective by subcutaneous injection, should be adopted, so that although unable in any way to check the progress of the malady we may at least mitigate the most terrible accompaniment of its distressing and inevitable course.

FIFTY-EIGHTH ANNUAL MEETING

OF THE

BRITISH MEDICAL ASSOCIATION.

Held in BIRMINGHAM, July 29th, 30th, and 31st,
and August 1st.

THIRD GENERAL MEETING, THURSDAY, JULY 31ST, 1890.

Dr. W. F. WADE, F.R.C.P., President, in the Chair.

THE third general meeting of the Association was held on Thursday afternoon.

Address in Surgery.—Mr. LAWSON TAIT delivered the address in Surgery, which was published in the JOURNAL on August 2nd, page 267.

Mr. TIMOTHY HOLMES moved, "That the cordial thanks of the Association be given to Mr. Lawson Tait for his admirable address in Surgery." He submitted the motion with more than the ordinary conventional enthusiasm with which addresses were termed "admirable," for it was a thing to be admired that a man should stand up and direct the energies of the Association to the improvement of medical education and examinations. As an old member of the College of Surgeons, and as an old examiner in surgery, he had listened to Mr. Tait's observations with wonder, and with all possible enthusiasm. It was undoubtedly only too true that as surgery had become more of a science, so too much importance had been attributed in examinations to the scientific side of it. These things were made too much matters of cram and of detail and too little matters of knowledge and of practice. It was for the members of the Association, if necessary, to compel the authorities to remedy this state of affairs.

Professor D. McLEAN (Michigan) seconded the motion, and referred to the time when he and Mr. Tait were fellow students in the University of Edinburgh. If the medical profession of the whole world, with its philanthropic and humanitarian ideas, and practice, and hopes, and aspirations, could be united in one great object, there would be little left to be desired, and other professions might stand aside. There would be no further use for lawyers, and hardly any for ministers.

The resolution was carried by acclamation.

Mr. LAWSON TAIT: Ladies and gentlemen, my first duty is to thank you for your patient listening to an address which was twenty minutes longer than I intended it should be. Your gracious vote of thanks I cannot reply to in adequate terms. It is something in one's lifetime to be spoken of and have one's views approved by one of the *patres conscripti* of our profession such as Mr. Holmes. All his professional life he has been in the front rank of those who desire the highest and best things for his profession. Professor Donald McLean and I were in Edinburgh thirty years ago, and it is charming to me to meet my old fellow student, who has come back to the country of his birth.

Presentation of the Gold Medal to Surgeon Parke.—On rising to receive the gold medal of the Association, Surgeon Parke was greeted with enthusiastic applause, which was continued for some minutes.

The PRESIDENT said that the reception Surgeon Parke had received rendered necessary only a very short speech from himself. It was comparatively easy to state in words particulars of deeds done in a few minutes or hours, but when they had to speak of acts repeated day after day, week after week, month after month, and even year after year, the task became more difficult. An accumulation of hundreds and thousands of acts performed cheerfully and simply by Surgeon Parke warmed their hearts and commanded their respect. Coolness of head and stoutness of heart which sustained him in the performance of his always arduous, often loathsome, and constantly dangerous, duties were what they had now, in a small way, to recognise. He had authority for stating that but for the state of his health, which, however, they were glad to know was rapidly improving, Mr. H. M. Stanley would have been present, with Mrs. Stanley, to tell them in some detail what Surgeon Parke had done. In Mr. Stanley's absence he (the President) could not do better than quote a few of his published words, which he himself, from having Surgeon Parke as his guest for a few days, could testify were only words of truth and soberness. "This expedition," Mr. Stanley said, "possesses the rarest doctor in the world. He is such a combination of sweetness and simplicity, so unostentatious, so genuinely unobtrusive. We are bound to him by the cords of love. We have seen him do so much out of pure love for his cases that human nature becomes ennobled by this gem. I greatly honour what is divine in man. This gift of gentleness and exquisite sensibility affects even the dullest. May the kindly angels record this nobleness, and obliterate all else." He would not dim the beauty of this exquisite sketch by any words of his own. The material medal was awarded by the Council of the Association, but the honour which it symbolised must come from the true and hearty approbation of all its members. In conclusion he asked the meeting to give three hearty cheers for Surgeon Parke.

This having been enthusiastically done, the President hung the blue ribbon attached to the medal around Surgeon Parke's neck, and addressing him said:

Surgeon Parke, of the Army Medical Service, I have the honour, on behalf of the thirteen thousand members of this great Association, to ask you to accept this medal which we have conferred on you. In their name, and on their behalf, I offer you the right hand of fellowship, and heartily wish you God-speed.

Surgeon PARKE, who was greeted with prolonged applause, said: Mr. President, members of the Council, ladies and gentlemen, allow me to express to you my grateful thanks for the honour you have conferred on me by awarding me the gold medal of the British Medical Association. I can assure you that those thanks may be divided into as many parts as there are members in the Association. It is my greatest gratification to know that my services in connection with the Emin Pasha Relief Expedition have been appreciated by members of the profession to which I have the privilege to belong, because I know that there are none more critical, and none who are better judges of the difficulties which have had to be overcome, especially when you consider that for 6,000 miles our only means of transport was on men's heads. I feel not the less gratified that after three years of marches across Africa, through difficulties and disasters and dangers which, perhaps, the annals of history can scarcely equal, I have the good feelings of my wonderful chief and my brave companions. I especially thank you for this distinction, because it is significant evidence that the British Medical Association, at any rate, approved of my endeavours to carry out the teaching and the training and the principles for which I am indebted to the profession. I will not occupy you very long, as I expect that since Stanley's book has been published