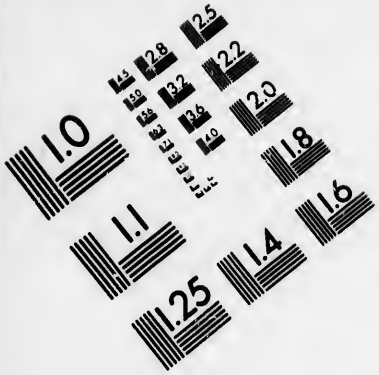

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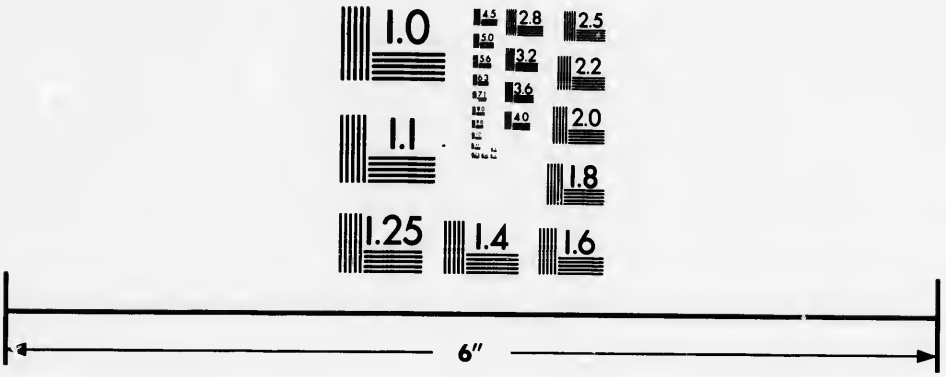

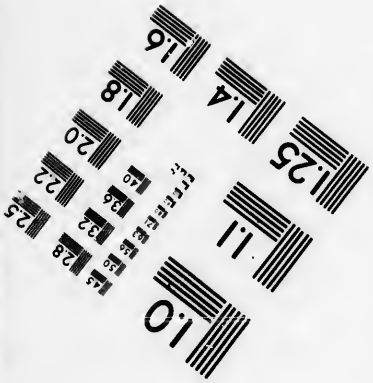

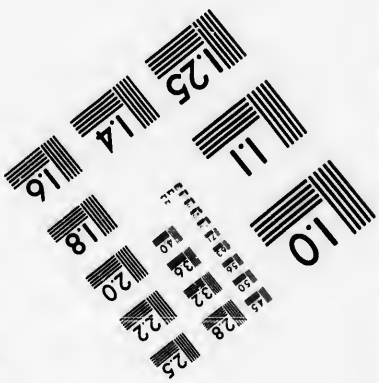

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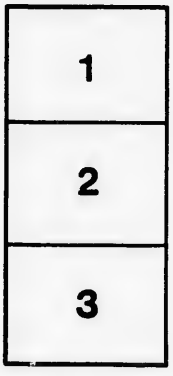

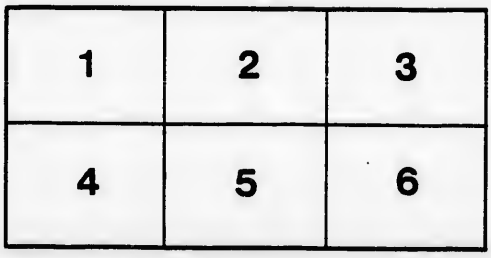

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A RETROSPECT OF SURGERY.

JANUARY 1886—JANUARY 1890.

PREPARED BY

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RETROSPECT OF SURGERY.

By Francis J. Shepherd, M.D., C.M., M.R.C.S., Eng.
Surgeon to the Montreal General Hospital; Professor of Anatomy and Lecturer on Operative Surgery, McGill University.

Operative Treatment of Enlarged Prostate.—The treatment of enlargement of the prostate is a problem which constantly presents itself to every surgeon, and so far its solution is not the most satisfactory. In a certain proportion of cases the judicious use of the catheter yields fairly good results, but in many of these cases a day comes when even the friendly catheter cannot be depended upon, and something else has to be tried. Cystitis or other accident may intervene, and to obtain relief operative measures are undertaken. The simplest operation is perineal section, and marked relief is often afforded, but very frequently this relief is only temporary. When the cause of the obstruction to the outflow of urine is hypertrophy of the prostate, no procedure which does not aim at removing this cause will prove of any permanent benefit. At the meeting of the British Medical Association held at Leeds in August last, Mr. McGill opened a discussion on "The Retention of Urine from Prostatic Enlargement" (*British Medical Journal*, Oct. 19, 1889). His paper was based on twenty-four operations of prostatectomy through a suprapubic incision, performed by various surgeons at the Leeds Infirmary. He submitted and discussed the following propositions:—

(1) The prostatic enlargements which give rise to urinary symptoms are intravesical and not rectal.

(2) The retention is caused by a valve-like action of the intravesical prostate, the urethral orifice being closed more or less completely by the contraction of the bladder and its contents.

(3) That in many cases self-catheterism is the only treatment required.

(4) When the catheter treatment fails, or is unavailable, more radical measures are necessary. He states his belief that a large proportion of cases treated by catheter sooner or later

break down, the urine becomes ammoniacal, the desire to micturate continues, and the catheter only relieves for a few minutes at a time. The greatest care does not always prevent this result, nor does the greatest carelessness always induce it. In other cases the patient cannot be taught to pass the catheter himself, and the constant attendance of a surgeon is impracticable. Now the radical measures recommended by McGill are as follows:

(5) Drain the bladder thoroughly for a time and permanently remove the cause of obstruction; the intravesical prostatic growth must be removed.

(6) These two indications are best fulfilled by a supra-pubic rather than by a urethral or perineal operation. Out of 24 cases operated on in the Leeds Infirmary, 8 remain permanently well. There were 4 deaths—1 due to shock, 2 due to shock and hemorrhage, and 1 to retro-pubic suppuration. All the cases were men between 60 and 70; almost all were in a bad state of health, and could not have lived long unless relieved. In seven cases the operation was undertaken for the removal of stone, and prostatectomy was incidental, excluding these and the four cases of death, also one lost sight of and two still under observation, leaves ten still to be accounted for. Eight of these remain permanently well, one only having to use the catheter occasionally; in one case the operation was not satisfactorily completed and no relief was obtained; in the tenth case relief was for a time obtained, but he relapsed and died ten months after operation.

In the discussion which followed, Mr. Bruce Clarke advocated first making a perineal incision and examining the bladder, and seeing what needed to be done, and afterwards to perform suprapubic cystotomy.

Dr. Kummell of Hamburg has also written on this subject. He reports six cases operated on; the operations were done on severe cases, in which the various ordinary means had been used a long time. He had recourse to suprapubic cystotomy. He extirpated not only the median lobe, but all portions of the prostate projecting into the bladder. He operates by opening the bladder by a suprapubic incision; uses sponges and iodoform gauze for

plugging. The projecting parts of the prostate he seizes with a forceps, burns off what impedes the passage with the galvano-cautery loop or Paquelin's cautery. If necessary the neck of the bladder is dilated and as large a catheter as possible introduced; in a few days it is possible to introduce the thickest catheters. By this time suture of the bladder can be undertaken. The patient should be got about as soon as possible to avoid the dreaded hypostatic pneumonia. He uses continuous catgut suture and removes catheter in eighteen days. One out of the six cases died of broncho-pneumonia the eighteenth day after operation. In his cases Kummell does not claim that the results were so perfect that the after use of the catheter was not needed, but the patient's condition was so serious that in many cases the operation was a life-saving one. He recommends this procedure in those cases where there is nothing to lose, but everything to gain.—(*Eighteenth German Surgical Congress. Centralblatt f. Chir*, No. 29, 1889, and *Annals of Surgery*, Dec. 1889.)

SURGERY OF THE KIDNEY.

Removal of Kidney.—Schede of Hamburg, at a meeting held in July, 1888, read a paper on twenty cases of extirpation of the kidney. Eleven cases were cured, two improved, and seven died within the first few days after operation, some being operated on under the most unfavorable circumstances. Schede's mortality is only 35 per cent. This is an improvement on that given by Gross in 1885 of 44.6 per cent. Schede uses the lumbar incision, and thinks that the future mortality in this operation will be much lessened.—(*Deutsch. Medicin. Woch.*, No. 52, 1888.)

Nephrectomy in a case of Horse-shoe Kidney where one-half was affected with Hydronephrosis.—In the *Annales des Maladies des Organes Génito-Urinaires* for June last, M. Vignard gives a translation of Prof. Socin's (Basle) paper on the above. A woman, 47 years of age, was admitted into the hospital with symptoms of intermittent hydronephrosis of the right side, severe colic, and vomiting. The diagnosis was not easily made out, for Professor Socin was not clear whether the tumor might not be

cennected with the mesentery or the panereas. However, the tumor was aspirated and about 500 cubic centimetres of urinous fluid removed. A urinary fistula remained, which transmitted purulent urine, while the bladder contained healthy urine. A further operation was undertaken in May 1888, at the patient's request. The abdominal incision was made to the outer side of the rectus muscle and the vascular pedicle of the right kidney ligatured, and it only remained to free the lower end of the kidney when it was discovered that it was prolonged by a sort of bridge four centimetres wide across the vena cava and aorta to the opposite kidney, forming thus a horse-shoe kidney. The isthmus was found to be only slightly connected with the front of the vessels, and he therefore divided it by means of a thermo-cautery. Five ligatures proved to be enough to arrest all hemorrhage from the divided surface, the capsule was sewed as a flap over the cauterized surface, and the operation was completed by a lumbo-abdominal drain. The progress was excellent. The urine was albuminous and bloody for a few days only. The patient went out well twenty-five days after the operation. She was seen four months later in good health, with good color, and able to work.

Braun of Heidelberg has reported a somewhat similar case, and the fact that a horse-shoe kidney existed was only made out during the operation for pyonephrosis. The adhesions between the vena cava and the isthmus were so close that hemorrhage occurred, and the patient died at the finish of the operation. Braun, therefore, came to the conclusion that the existence of a horse-shoe kidney was an absolute contra-indication to operation. Socin's case, however, shows this conclusion to be incorrect. The diagnosis is impossible before operation, and the surgeon must treat the case as occasion demands.—(*London Medical Recorder*, Aug. 1889.)

Horse-shoe kidney is comparatively rare. According to Prof. Roth of Basle it occurred five times in 1630 autopsies (1 in 326). I have seen three in my experience, which is not inconsiderable. Normally they have no attachment to the vena cava and aorta, and in Braun's case the adhesions must have

been due to the inflammatory action produced by the pyonephrosis. No doubt in these cases the operation is almost necessarily a fatal one, but in cases such as Socin's there is no good reason why success should not follow operation. In some cases the isthmus is much longer and thicker than others. Prof. W. Gruber describes two cases in which the isthmus was membranous only. Anomalies of kidneys should be familiar to surgeons. A not uncommon one is the displacement of one or both organs. I saw a case last year where the left kidney was situated between the two common iliac arteries. The hilus was anterior and the kidney was disc-shaped. It must be also borne in mind that the kidney may be single. I have seen only one example of this anomaly.

Renal Surgery at the British Medical Association.—At the last meeting of the British Medical Association a most interesting discussion took place on renal surgery (*Brit. Medical Jour.*, Nov. 16th, 1889). It was opened by Mr. Henry Morris, who drew attention to the following points: (1) The various ways in which renal calculi are imbedded in the kidney require special precautions whilst operating. (Mr. Morris is of opinion that nothing short of a digital exploration of the pelvis and calyces of the kidney will suffice to discover stone in some cases.)

(2) Tubercle of the kidney, as well as suppurating foci due to other causes, may give rise to the same tactile sensations as small calculi.

(3) Tubercular disease of the prostate is a source of fallacy in diagnosing renal calculi. It is well known that pain may be transferred to the renal region from disease of the lower urinary tract; and if there be, in addition, a small amount of pus and blood in the urine, and no cystitis, the diagnosis is much complicated.

(4) Nephrectomy is of very doubtful value in advanced tubercular renal disease.

(5) Lumbar nephrectomy is the proper treatment for advanced hydronephrosis, and for large collections of fluid behind the peritoneum, the result of lacerated kidney.

(6) Nephrorrhaphy for movable kidney is of great service.

(7) The changes which the perinephric tissue undergoes, under long continued irritation, sometimes render the search for the kidney very tedious, and, maybe, ineffectual.

Mr. Bennett May had operated on 15 patients for stone or suspected stone—12 males and 3 females. In 13 cases he found a stone and in 2 he did not. In fully half the cases the stone was fixed in the parenchyma of the kidney. These stones, mostly of slow growth, are circular or pyramidal in shape, not branched, and occur in young males. The kidney remains perfectly healthy even in a late stage of the disease. The prominent symptom in these cases is pain, and the main diagnostic test is pain on deep local pressure beneath the last rib. Pus is commonly absent, and traces of blood may be found with the microscope after exercise, The stones are difficult to find, but when removed, give most perfect results. Should the surgeon fail to find the stone by acupuncture, then the kidney should be cut into and explored with the finger and sound. Stones in the pelvis of the kidney commonly grow much more quickly and to a larger size. Pus appears early and is a prominent symptom, and the kidney soon undergoes structural changes, ending in pyonephrosis. These stones are usually easy to find, and the recovery is apt to be imperfect.

Mr. David Newman of Glasgow contrasted the results of nephro-lithotomies with or without suppuration of the kidney. Of the former, of 60 cases, 34 recovered and 26 died (43.3 per cent.) ; of the latter, where there was no suppuration, of 42 cases not one died. This indicates the importance of early diagnosis. In cases of hemorrhage, catheterization of the ureters and estimation of quantity of albumen and hæmoglobin in the urine may aid one in determining the seat of the hemorrhage and ascertaining whether the disease is confined to one kidney. Mr. Newman said that in renal surgery, the condition with which he was most familiar was movable kidney. Out of 27 cases he had met with in private and hospital practice only seven needed operative interference. In the great majority of cases the application of a well-fitting elastic bandage with an air pad was sufficient. When performing nephrorrhaphy, Mr. Newman, in addi-

tion to stitching the kidney to the abdominal parietes, splits the fibrous capsule and separates it from the surface of the kidney, as it is of little use to stitch the adipose capsule, because it is so loose.

Mr. Lawson Tait said his first contribution to renal surgery was made in July 1884, though his first operation on the kidney was performed in April 1874. He gave a list of seventy-four operations performed by himself on the kidney with six deaths. The cases were as follows:

Simple exploratory incisions, 4.
Nephrotomy, 44 cases with one death.
Nephrectomy, 22 cases with four deaths.
Incomplete operation, 1 case with one death.
Nephrorrhaphy, 3 cases with no deaths.

Among the nephrotomies 14 were for stone, and of these one died. He strongly advocated preliminary nephrotomy in doubtful cases; it will save many organs from removal, and make a subsequent nephrectomy far less risky. Mr. Tait strongly condemns the operation of nephrorrhaphy and will have nothing more to do with it. One of the three patients operated on has subsequently died under circumstances for which he thinks the operation might be blamed. He does not think it matters much how the kidney is reached. Mr. Tait has several times opened the abdomen expecting to find ovarian tumors, and has found soft cancers of the kidney. The conclusions he draws from his experience are that all tumors of the kidney, all suppurating kidneys, and all kidneys with persistent, incurable, and unbearable pain in them, should be exposed by incision, laid open and thoroughly explored by the finger-tip. Stones may then be removed, abscesses drained, and hydatid or cystic growths removed with trifling risk. He also said that mere exploration in some cases of tumors leads in a mysterious way to a cure.

Mr. Bruce Clark related an interesting case where, failing to find stone by needle puncture, he closed the wound. The patient, not being relieved, returned again. The kidney was again explored, this time by the finger, but no stone found, so the kidney was excised, and on examining it a small, sharp stone, the size

of a pea, was found hidden away in one of the recesses of the organ. He advocated the removal of large diseased kidneys by the anterior incision.

Mr. Kendall Franks of Dublin called attention to a class of cases which were not uncommon, viz., those in which the diagnosis of renal calculus was almost certain, and in which the symptoms clearly indicated the affected side, and yet in which, when the kidney was exposed, the most careful digital manipulation and the most systematic exploration with a long needle failed to detect the presence of a stone. In such cases formerly the wound was closed, or, as Mr. Morris had done, the organ was excised. Mr. Franks advocated incising the kidney *in situ* and searching for the stone systematically with the finger. Mr. Franks laid stress upon the importance of leaving the wound in the kidney to granulate without using any means to close it. He advocated excision in cases of tubercular disease of the kidney.

Nephro-Lithotomy.—Mr. H. A. Jacobson, in some clinical remarks delivered at Guy's Hospital (*British Medical Journal*, Jan. 18, 1890) on the *Symptoms and Conditions which justify Nephro-Lithotomy*, makes remarks on the following symptoms: (1) Continued hæmaturia or passage of blood and pus; (2) pain or tenderness in the loin and elsewhere; (3) points connected with previous history, *e.g.*, habitat, habits, lithiasis, oxaluria, passage of previous stones, renal colic; (4) frequency of micturition; (5) absence of any condition in the rest of the urinogenital tract to explain the symptoms; (6) failure of previous treatment. The chief conditions simulating renal calculus are: (1) Lithiasis and to a less degree oxaluria; (2) tubercular kidney; (3) pyelitis, not tubercular; (4) movable and (5) aching kidney, especially if associated with (6) neuralgic conditions; (7) disease in organs contiguous to the kidney; (8) disease of lumbar spine; (9) interstitial shrinking nephritis; (10) malignant disease of the kidney, especially of the pelvis, and malignant disease around the 12th dorsal nerve (a case is reported). The chief practical points in the performance of nephro-lithotomy he considers to be as follows:

(1) To count the ribs; the last rib may be rudimentary and the 11th mistaken for it.

(2) To make a sufficiently free incision.

(3) To pack away with sponges the colon, which is often troublesomely distended in these cases with flatus.

(4) If a stone cannot be felt in pelvis or after palpation anteriorly or posteriorly, the kidney should be drawn out as far as possible and carefully examined.

(5) In puncturing the kidney, the calyces should be opened systematically.

(6) When palpation and acupuncture fail to find the stone, then the kidney should be opened and carefully sounded.

(7) Hemorrhage from kidney is easily arrested by careful, firm pressure.

(8) Sources of difficulty in finding a stone are (*a*) mobile kidney, (*b*) stone in anterior part, and (*c*) stone in a sacculated kidney.

(9) In large suppurating kidney first incise freely and drain kidney before performing nephrectomy.

I cannot agree with Mr. Jacobson as to the method of exploring the kidney, and my experience has been that in those cases where the stone is small and hidden away in one of the calyces, there is often little chance of its being found either by palpation, needling, or the introduction of a sound. A free incision into the kidney and exploration with the finger is the only certain method of finding these calculi. I have several times cut down on the kidney for suspected calculus, palpated, needled and used the sound, yet failed to find the stone; but in the last case I made a free incision into the posterior border of the kidney, introduced my finger, and soon came across a small stone encapsuled at upper end of organ. I have never had any difficulty in arresting hemorrhage, and have never found it necessary to plug the wound with gauze; pressure with sponge or finger easily arrests any hemorrhage, even when it is very free. I have no doubt at all that many of the so-called cases of nephralgia which have been operated on have been cases of stone undiscovered, because not thoroughly searched for with the finger through a sufficiently large incision.

Dr. E. L. Keyes of New York recently read a most interesting

paper on *Nephro-Lithotomy* before the Medical Society of the State of New York (*N. Y. Medical Record*, Feb. 8th, 1890). His experience extends to six cases of actual or suspected stone. In one case the kidney was filled by a large-branched calculus weighing two ounces, which was extracted in pieces with great difficulty; there was much hemorrhage, which was arrested by hot water. Dr. Keyes' conclusions are as follows:

(1) The posterior exploratory incision upon a kidney suspected to contain stone is devoid of any serious danger when performed with proper care, and should be resorted to more often than it is.

(2) The best incision is the transverse, below the 12th rib, with as much of a liberating incision downwards along the edge of the quadratus as may be required to gain ample room.

(3) The kidney may be freely cut into and rudely lacerated with the finger, when the stone calls for it, without producing any hemorrhage which hot irrigations will not control.

(4) It is better, in the case of a large branching calculus, to break it up and extract it in fragments rather than attempt to remove it entire.

(5) So little danger attaches to the posterior incision that it seems wiser always to make it the first step, reserving peritoneal exploration for a later resource in cases where the posterior operation miscarries.

Calculus Removed from the Ureter.—A paper was read at a recent meeting of the Clinical Society of London by Mr. Twynam of Sydney, New South Wales (*Lancet*, Feb. 1, 1890), describing how, in a child aged 8 years, a calculus was successfully removed from the ureter. The patient entered hospital suffering from pain in the abdomen and hæmaturia. Pain was felt over the pubes and at tip of penis after micturition. No stone in bladder. Distinct tenderness in left loin. High temperature. On Feb. 6th an exploratory incision was made in the left linea semilunaris and the left kidney and ureter examined, but no stone found. A calculus was found, however, in the right ureter two inches from the bladder, and when pressed upon could be felt through the rectum. The stone was removed by linear incision in a subsequent operation, because patient had a tempera-

ture of 106° and convulsions. Incision was made as if to tie the common iliac artery. Some difficulty was experienced in isolating the ureter, but it was ultimately accomplished and the stone removed with forceps through a linear incision. It weighed six grs. and was the size of a No. 12 catheter. The wound in the ureter was closed with fine silk, a drainage tube was introduced into the wound cavity, and the wound dressed with salicylated wool. Urine ceased to flow from wound on the fifth day, after which it rapidly healed, and the boy made a perfect recovery. The striking points in this case were (1) the difficulty of diagnosis owing to the fact that a stone in the bottom of the right ureter caused pain in the region of the left kidney, (2) the novel method of removing a stone situated so low down in the ureter.

In his Harveian lectures on the *Surgery of the Kidney*, Mr. J. Knowsley Thornton (*Lancet*, Dec. 7th, 1889), in speaking of puncture and lumbar nephrotomy, briefly summarizes as follows: He would restrict puncture (1) to decide in doubtful cases between solid and fluid tumors of the kidney; (2) to relieve painful distension when nephrotomy for some special reason is not at once advisable or possible; (3) to remove urine, serum or pus from a very large tumor to reduce its bulk in the performance of nephrectomy; (4) as a tentative attempt at cure in some cases of simple cyst or hydronephrosis; (5) to localize the position of renal or circumrenal abscess when the physical signs are not clear enough for free incision; and (6) to gain time and relieve harmful tension in some cases of calculous suppression. He would restrict the use of nephrotomy to (1) calculous suppression in which the incision seems preferable to mere puncture, with the chance of being able also to remove the stone; (2) for the cure by subsequent drainage of simple cysts, abscesses and hydatids; (3) for the cure by subsequent drainage of traumatic pyonephrosis or pyelitis, and in the early stages of tubercular suppuration; (4) for the possible cure of more advanced calculous or tuberculous suppurations when the patient will not submit to nephrectomy; and (5) for the performance of nephro-lithotomy in some cases. Mr. Thornton strongly objects to lumbar nephrec-

tomy for tumors of the kidney, one of the objections being the possibility of not being able to find the kidney, an accident that has happened to experienced London surgeons in a large number of cases; another, that a single kidney may be removed. He being an abdominal surgeon, is altogether in favor of the abdominal method by the lateral incision of Langenbuch along the outer border of the rectus muscle. If it be necessary to drain, a Keith's glass tube is used, and should be cleaned each day under the spray. He says that, as a precise and scientific operation, there is no comparison between the abdominal operation and its lumbar rival. After the operation he allows no opium or stimulants, but if it is absolutely necessary to give a sedative, he gives potassium bromide and chloral injections per rectum. Mr. Thornton has only had a mortality of 20 per cent in his cases of nephrectomy.

Wounds of the Kidney.—M. Taffier of Paris, in an article on *Wounds of the Kidney* (*Archiv Gén. de Med.*, March 1889), says that in cases of wounds of the convex edge of the kidney there occurs a copious hemorrhage from a network of veins in the cortical substance of the organ, this being easily arrested, however, by slight compression. Wounds of kidney are not followed by urinary infiltration; they have a remarkable tendency to heal rapidly and without suppuration,—in 69 cases only seven suppurated. Hemorrhage, in case of injury of the hilus, is, next to shock, the most important symptom, and this may be so profuse as to be followed by death from this cause alone. In bullet wounds, secondary hemorrhage is frequently observed. Hæmaturia in wounds of the kidney is characteristic, though not always present (18 in 31). Anuria is the exception.

Under the head of complications may be mentioned prolapse of the kidney. This may occur without any injury of the kidney having taken place. Suppurative processes are relatively infrequent. Fistulæ are very rare even after suppuration. Among 78 wounds of the kidney recorded in the surgical history of the war of the Rebellion, in only one case did a permanent fistula remain.

The prognosis in cases of wounds of the kidney must be cautiously given. Of course, if other internal organs are injured the case becomes much more serious. When a case presents itself it should be carefully cleansed antiseptically and precipitate nephrectomy should be avoided.

Treatment of some forms of Chronic Suppurating Kidneys by Perineal Puncture and Drainage.—In an article on the above subject, Mr. Reginald Harrison comes to the following conclusions (*Lancet*, Dec. 7th, 1889):

(1) That in a large number of cases of simple suppurating pyelitis caused by obstruction below, the pus gradually and completely disappears as the resistance to the urine is removed. This is exemplified in the ordinary treatment of urethral stricture by dilatation or otherwise.

(2) That some advanced forms of chronic double suppurative pyelitis from obstruction below, where the suppuration continues to be excessive after the obstruction has been removed or relieved, are best treated by an opening in the perineum where the drainage is free and dependent and irrigation can be conveniently employed.

(3) Perineal puncture (elsewhere described by Mr. Harrison) best meets the requirements of these cases, and may be said to be free from risk. Mr. Harrison says that perineal puncture entails no prolonged confinement in bed. He has had patients going about ten days after operation. Mr. Harrison has devised a very simple contrivance consisting of a soft rubber drainage-tube for retention in the bladder by a T-bandage, to which is attached a continuation-tube fitted with a stop-cock, the end being retained in a belt around the patient's waist.

(4) In cases of suppurating kidneys, where not too advanced, by making a dependent perineal opening, whatever remains of sound suppurating kidneys may be saved and life prolonged, whilst the comfort of the patient is materially added to.

Ligature of the Common Iliac Artery for Hip-joint Amputations.—Dr. Poffert of Giessen reports a case (*Deutsch. Med. Woch.*, No. 29, 1889) in which Prof. Bose had resorted to preliminary ligature of the common iliac artery as the first step in

a hip-joint amputation. The patient, a strong, healthy man, aged 40, had noticed for six months that his thigh had begun to swell above the knee, and that the past few weeks the swelling had increased rapidly and caused pain. Examination showed a tumor extending from the condyles to the groin, its upper limit being felt anteriorly under Poupart's ligament, and posteriorly a little below the gluteal fold. The limb was cylindrical in shape, enlarged ; skin over tumor tense and shiny. Veins much dilated. No fracture of femur. Amputation was performed Dec. 11th, 1884. He first proceeded to tie the common iliac artery in the usual manner. The artery and vein were easily exposed, and seen to be surrounded by fat and enlarged glands. The vein and artery were ligated and the glands removed. The wound was closed, a drainage-tube being inserted at the lower angle. The amputation was now performed by anterior flap, consisting of only skin and fascia ; the posterior flap consisted of skin and muscular tissue, which here was healthy. Very little hemorrhage took place. The large wound was drained and closed with silk sutures. The pulse after the operation was excellent, and the patient made a rapid and perfect recovery. Tumor, a spindle-celled sarcoma, starting from bone. Four years after operation patient was perfectly healthy and free from return of disease.—(*Quoted in Annals of Surgery*, Dec. 1889.)

The Use and Abuse of Drainage Tubes.—Mr. Rickman Godlee, in an interesting article on the above subject (*Practitioner*, Feb. 1890), comes to the following conclusions :—

The advantages of doing without them are—(1) The healing is more rapid. (2) The scar is more uniformly linear. (3) The chance of failing with the antiseptic element is much diminished.

Disadvantages are—(1) The temperature does not seem to keep so absolutely normal as we see it in perfectly drained wounds. (2) There is risk of blood or serum collecting under the flaps ; and while in many cases this may be absorbed, in others it will require removal, and then the cure is probably longer than it would have been if drainage had been employed at first.

Dr. Hans Schmid of Berlin, in an article on the *Changes in*

Value and in the Manner of Draining Wounds (*Berliner Klinik*, Hft. 11, May 1889), says that rubber tubes are frequently compressed by the dressings and bandages, and that their benefit is a delusion. Infection of wounds after operation is represented by two types—either a diphtheritic slough appears on both walls of the wound after union of the skin over the wound, or else a phlegmanous inflammation of the tissues obtains. In neither of these two cases are drainage tubes of any avail. Drainage tubes are frequently stopped at both ends by clots and granulations. They always act as foreign bodies, and may prove disastrous to an aseptic course by containing air. Finally, the presence of drainage tubes calls for an unnecessary change of dressing. Dr. Schmid has treated between 600 and 900 major surgical operative cases without drainage tubes, and in all cases he was contented with the results, and no case gave cause for serious apprehension, but once in a while retention of bloody serum occurred, which occasionally (if not speedily let out) would turn purulent.—(*Quoted in Annals of Surgery*, Nov. 1889.)

Long-standing Dislocation of the Shoulder treated by Operation.—Sir Joseph Lister (*Lancet*, Jan. 1890) reports two cases of the above successfully treated by operation. The first case was that of a man, aged 47, who came to King's College Hospital eight weeks after having dislocated both shoulders. On admission, both limbs presented the usual characters of subcoracoid dislocation. He operated by first making an incision from the coracoid process downwards and somewhat outwards between the deltoid and great pectoral, the tendon of the subscapularis was divided at its insertion, and then with a periosteum detacher proceeded to separate the soft parts from the head of the bone and the inner part of its neck ; pulleys were applied, and after protruding the head of the bone, dividing some tense bands, and separating the external rotators, the bone was returned with difficulty to the glenoid cavity. A week later the other shoulder was operated on in the same way, except that the head of the bone was at once protruded and the attachment of all the rotators divided. In this instance the head, after two attempts, was

drawn into place by pulleys. The wounds did perfectly well, and there was no suppuration ; passive motion was employed and kept up ; serous oozing for nearly two months ; he was discharged from hospital two months after operation, and returned in about two months for inspection. The arms could be moved to a right angle and rotation was much improved, and patient could do his work as an agricultural laborer.

The second case was that of a young man, aged 23, who was admitted into hospital in July, 1887, seven months after having dislocated both shoulders in an epileptic fit. On both sides the dislocation was subcoracoid. The shoulder was operated on in the same way as the first, but the result was not brilliant, so six months afterwards the other shoulder was operated on in a different way. He decided that he would merely cut down on the head of the bone and remove it piecemeal by means of chisel and hammer without disturbing the attachments of the external rotators. For a study of the skeleton with the humerus in the subcoracoid position had convinced Sir Joseph that the removal of the articular surface without interfering with the tuberosities would allow the bone to drop back in relation with the glenoid cavity. This was done January 1888, and the immediate result was good. The bone went readily into place, recovery of movement was much more rapid than on the other side, and he had almost perfect use of the arm.

Sir Joseph Lister would advise that when the surgeon feels in doubt as to whether it is prudent to make attempts at reduction, or when such attempts do not succeed, he should, in the first place, cut down upon the bone by the usual incision, and then detach with a periosteum elevator the soft parts from the inner side of the upper end of the humerus. This will ensure the avoidance of injury to the axillary vessels. Should these means fail, then detaching the heads of the rotator muscles and removal of the head of the bone will ensure a useful limb.

Note on a possible means of Arresting the Progress of Myxœdema, Cachexia Strumipriva, and allied Diseases.—Mr. Victor Horsley (*British Medical Journal*, Feb. 8th, 1890) suggests that after the removal of the thyroid to prevent cachexia

strumipriva a portion of the thyroid gland from one of the lower animals should be transplanted into the peritoneal cavity or into the subcutaneous tissues. The successful growth of the grafted gland would probably bring about arrest of the diseased process by reason of restoration of lost function. Performed under strict aseptic conditions the operation would be without risk or inconvenience. He suggests that the thyroid gland of an anthropoid ape would be best, but this not being obtainable, he advises that of the sheep as most resembling in its anatomical characteristics that of man. One lobe or half of one lobe would be sufficient. Mr. Horsley's suggestion is based on the observations of Prof. Schiff and Dr. Von Eiselberg.

Suture of Nerves.—E. Etzold records (*Deutsch. Zeitschrift f. Chir.*, Bd. xxix, Hft. 5 and 6, 1889) a number of cases occurring at the Dorpat Clinic, in which various nerves, chiefly the ulnar, radial, median and musculo-cutaneous, were sutured at different intervals after their division with great success. After considering the whole subject, he comes to the following conclusions:

(1) Nerves do not unite by either primary adhesion or second intention. The axis cylinders are the extension of the cells of the ganglia, and their re-formation by means of an exudation of cellular elements of mesodermal origin is, for anatomical reasons, not to be expected.

(2) Divided nerves are regenerated by means of a proliferation from the proximal stump. This was established by experiments on animals, and has been confirmed by clinical observation, which shows beyond all doubt that the proximal end of a divided nerve is regenerated earlier and more completely than the distal end.

(3) The return of sensation is of no value in the diagnosis of nerve regeneration. The symptoms indicating its occurrence are—(*a*) active muscular contraction; (*b*) disappearance of atrophy, especially of muscular atrophies; (*c*) slow appearance of this improvement; (*d*) the return of faradic excitability in muscles previously paralyzed. The galvanic current is not of much importance in the diagnosis of nerve regeneration.

(4) Spontaneous union of divided nerves in the extremities is extremely rare. In high injuries of nerves, the prognosis is unfavorable in spite of nerve sutures.

(5) Regeneration of nerves is prevented by the extensive formation of cicatricial tissue.

(6) Nerve suturing is not only a justifiable operation, but in every traumatic case of nerve section it is the duty of the surgeon to adopt it.

(7) The essentials of success are—absolute antisepsis, complete hæmostasis, avoidance of irritation. If after nerve injuries a congested condition of the limb results, it should be elevated and massage employed as soon as the wound is healed. Direct galvanization of the nerve scar should be employed, as well as massage, soon after cicatrization in order to diminish the scar.

(8) It is not proven that electric treatment of the organs supplied by the cut nerves either limits the atrophy or favors nerve regeneration. Massage and passive gymnastics constitute the rational treatment for peripheral paralysis.

(9) The most extensive use of the extremity that is found possible after nerve section appears to have a favorable influence upon the healing.—(*Quoted in American Journal of the Medical Sciences for March*, 1890.)

New Method of Operating for the Relief of Deformity from Prominent Ears.—The deformity caused by prominent ears is very unsightly, especially in females. This deformity, from causes with which I am unacquainted, is peculiarly common in the neighboring United States, so it is quite fitting that an American should devise an operation for its relief.

Dr. Keen of Philadelphia (*Annals of Surgery*, Jan. 1890) describes a case operated on. The patient was aged 19, and the following operation devised for his relief. An oval portion of skin was removed from the posterior surface of the auricle, the cartilage being laid bare by dissection. In the long axis of the oval excision of skin a long, narrow piece of cartilage was removed, V-shaped on cross-section. Great care was taken not to cut through the skin on the anterior surface of the ear. On the left side three catgut sutures were introduced into the car-

tilage itself, in addition to those in the skin. The result was equally satisfactory on both sides. The two operations were done at the same time; they were attended by free bleeding, which was easily controlled. The result obtained was remarkably good.

Cancer of the Tongue.—Dr. Krause of Halle says that during the period extending from 1875 to 1888 ninety-one cases of carcinoma of the tongue were operated on at Prof. Volkmann's klinik. Of these, two died immediately after operation, these being cases of complete extirpation, of which there were thirty-five in all. The average duration of life following the operation in these last-named cases waas twelve months; but one was absolutely free from recurrence six years after. Of the fifty-six cases of partial extirpations, seven were found to be free from recurrence after the same lapse of time. The most rapid recurrence in this class took place in eight months. The microscopic diagnosis was established in all cases.

Prof. Volkmann, after trial of the submental method of operating, abandoned it. He likewise rejects preliminary ligature of the linguals, as well as preliminary tracheotomy. In the relatively easy cases the tongue is brought well forward and hemorrhage is arrested in the wound; in more difficult cases Langenbeck's method of temporary section of the lower jaw, with division of the palato-glossal arch, is adopted; a drainage-tube is placed in the recess of the tonsil. Cases involving the epiglottis are rejected. (*Deutsch. Med. Woch.*, No. 22, 1889; quoted in *Annals of Surgery*, Feb. 1890.)

New Method of Operating for Thoracic Empyema.—Dr. M. Ssubbotin says that in long-standing cases of empyema, in which plastic measures for recurring obliteration of the pleural cavity by collapse of the chest walls are indicated, he successfully performed the following operation. A portion of the 7th rib is resected in the usual manner, and the pleural cavity opened and thoroughly irrigated. This opening is packed in order to prevent septic infection. A longitudinal incision is now made upon the external edge of the pectoralis major muscle of about five centimetres in length, by means of which the 6th, 5th and 4th ribs

are bared without removing the periosteum ; from each of these ribs a small wedge is resected, so that the rib becomes movable at this point. A similar longitudinal incision is made in the posterior axillary line, and at this point the above-mentioned ribs are treated in a similar manner. The vertical incisions have no connection with the pleural cavity, and are sutured at once without damage. The portion of the chest wall lying between the longitudinal incisions now sinks in, and, as the healing process advances, becomes fixed in this depressed position, serving the double purpose of protecting the chest cavity and preventing in some measure the scoliosis which occurs so commonly after operations for empyema.—(*Vratch*, 1888, No. 45 ; quoted in *Annals of Surgery*, Feb. 1890.)

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