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ORIGINAL ARTICLES.

STATISTICS OF SURGICAL OPERATIONS FROM
1883 TO 1892.

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FOR eleven years it has been my privilege to be a member of the surgical staff of the Glasgow Royal Infirmary, and for the last eight years I have been one of the assistant surgeons. During this period of service I have been requested, chiefly in the autumn months, to act as surgeon in the Wards during the absence on holidays of the staff surgeon. My term of office is now rapidly coming to an end, and I have been collecting and tabulating the names of the patients on whom I have operated, and for the first time estimating results.

In this record of cases now published, the operations performed under anæsthetics in the Dispensary, or out-door department of the Infirmary, are not included: among these are cases of fistula, hæmorrhoids, harelip, nævi, talipes, reduction of dislocations, &c. For the last three years, however, I have operated rarely under anæsthetics at the Dispensary, and for two reasons. 1st. Owing to the number of patients seeking advice (an average of 15 new patients daily), I thought there was always a tendency to undue haste in the administration of the anæsthetic, and in the sending of the patient home after operation. This hurry could not be favourable to the success

of the operation, and was a source of danger to the life of the patient. 2nd. The majority of the patients who came for advice were not living in healthy homes. They were poor, and badly nourished, and, in most cases, very dirty. (The applicant for free advice who is driven up to the Dispensary in a cab or private carriage we have all heard much of, but I have never seen such a patient.) With such surroundings a simple operation is very liable to be attended by complications, entailing worry and anxiety to the operator. For these reasons the applicants were advised to obtain admission to the wards, where the necessary operations were performed.

It is only right also that some explanation should be given of the conditions under which these operations have been performed. In some of the cases, I have been summoned to operate in the temporary absence of the surgeon of the wards into which the patient was admitted, and my responsibility has ended with the return of the surgeon. Some of the credit of the result of the operation in such cases must in fairness be given to the surgeon who carried out the after treatment. In the majority of the cases, however, by the kindness of the surgeon, I have retained control of the patient.

With regard to cases in which one or other of the major amputations were performed, I have arranged them in five groups—viz., amputations of thigh, leg, foot, upper arm, and fore-arm. The accompanying tables give the age, the disease or injury, and the result of the operation.

From Table I it may be observed that there were 38 cases of amputation, with 3 deaths. In the following table the cases are classified into primary and secondary operations:—

AMPUTATIONS.	Primary.	Secondary.	RECOVERY.		DEATHS.	
			Primary.	Secondary.	Primary.	Secondary.
Thigh, . 15	6	9	5	8	1	1
Leg, . 4	4	...	3	...	1	...
Foot, . 10	4	6	4	6
Upper arm, 6	2	4	2	4
Fore-arm, 3	1	2	1	2
Total, . 38	17	21	15	20	2	1

Regarding the cases of death, 3 in number, only a few words are necessary. In the case of D. H., where there was a general smash of leg and lower part of thigh, the

patient was almost bloodless before operation, owing to the imperfect application of a tourniquet which was on the thigh on admission into hospital. During and after the operation there was serious risk of heart failure, and death, preceded by gangrene of a portion of the anterior flap, occurred on the seventh day. In the case of A. C. there was pyæmia at the time of amputation through the hip-joint, and this condition caused his death.

From Table II it will be noticed that of cases of excision of joints there were fifteen, with two deaths, the cause of death being general tuberculosis. In the case of T. W., which is classed as an excision, an incision was made into an abscess cavity, in which the head, neck, and great trochanter of femur was found loose and necrosed.

In other Tables there are arranged operations performed for affections of the rectum, and of the genito-urinary, vascular, and osseous systems; cases in which tumours were removed from the breast and elsewhere; cases of trephining of skull; cases of osteotomy; and cases of strangulated hernia in which herniotomy was performed.

Table VIII contains cases, three in number, of fracture dislocation of the spine. In these the laminæ of one or more vertebræ were divided and elevated, in order to relieve the spinal cord from the pressure resulting from fracture with displacement of vertebræ, and the operation was performed in most unfavourable conditions. In all, there was not only evident pressure, but symptoms which seemed to indicate disorganisation of the cord itself.

In Table XII there are three cases of nerve lesion with paralysis. The case of B. G. is fully reported in vol. xxix of the *Glasgow Medical Journal*, and the following is a brief abstract:—The patient, a boy, aged 10 years, as the result of direct violence, received a comminuted fracture of the right humerus 2 inches above the elbow-joint. Seven weeks later, after removal of splints, there was found to be complete paralysis of the parts supplied by the musculo-spiral nerve. For two weeks electrical currents and friction of the paralysed parts were employed, but without benefit, for the muscles gave no response to the continuous Faradic currents, and they were much atrophied. In the operation, sixty-one days after the accident, the seat of fracture was exposed, and the nerve found embedded in callus for about half an inch. The callus was removed bit by bit from the nerve, the wound dressed, and the limb placed in the extended position to prevent the liberated nerve from occupying the

groove made in the callus. Thirty-six days after the operation there was obtained from one muscle the first response to the galvanic current, and two weeks later all the paralysed muscles responded. From this time there was a gradual return of voluntary power. I have recently seen the boy, and the restoration of function is perfect.

The case of A. B. is reported in vol. xxxiii of the *Glasgow Medical Journal*. There was paralysis of the parts supplied by the ulnar nerve, with atrophy of muscles, absence of response to electrical currents, and the skin over the little finger congested. This condition resulted from an injury, by a circular saw, on the inner side of the upper arm, eight months before admission to the Infirmary. In the operation, the divided ends of the nerve were found enlarged and separated by a space of an inch. A section was made with the knife through the enlarged ends, the upper end of the nerve was forcibly stretched, and the two ends were stitched together. Four days later sensations of pain could be produced by irritant applied to the little finger, and the boy could slightly approximate and separate the fingers. From this time there was gradual improvement, and a year after the operation it was noted that sensation was perfect, but there was comparative atrophy of the interossei muscles. The boy was able to follow his employment.

In addition to the operations included in the preceding tables, there were 75 operations under anæsthetics. There was one case of foreign body (bead) in the bronchus in which tracheotomy was successfully performed, the bead being expelled ten days later by the wound in the trachea. Two plastic operations—one for respiration of nose and one for restoration of lower eyelid—were performed with excellent results. There were 13 cases of scraping or gouging out carious bone; 10 cases of periostitis in which incisions were made; 5 cases of necrosis in which the sequestrum was removed; and 10 cases of large abscesses opened and cured. The rest were cases of talipes, fistula in ano, harelip, and amputation of fingers or toes.

Of one case which was apparently of a simple nature, a few words may be recorded, because of its comparative rarity, and because of the death of the patient.

The case is that of Wm. M'D., aged 17, who was admitted into the Infirmary upon the 31st July, 1890, with a swelling of the left knee-joint following an injury of the joint. It was looked upon as a case of synovitis, and a splint was applied. A week later, to help in the absorption of the fluid from the joint, Scott's dressing was applied, and over it cotton wool and

an elastic bandage. In the middle of August the swelling was diminished and the splint was removed. On the 23rd August the young man complained of some pain on the outer side of the thigh in its lower third; there was some swelling of the part, and the body temperature was increased. The swelling increased, and there was pain on pressure. Fomentations were applied, and on the 27th, when there was distinct fluctuation, and the body temperature was over 100° F., the patient was put under chloroform, and a knife was introduced into the swelling. A chocolate coloured fluid escaped, and the swelling was evidently due to extravasated blood. The incision was enlarged and the cavity emptied and washed out. No bleeding vessel could be detected, and ultimately the cavity was packed with strips of lint saturated with Hazeline, and a bandage firmly applied.

On the 28th I was informed that the dressings, having been saturated with the discharge, had been removed, and fresh ones applied. On this occasion the packing was removed, and the cavity emptied and examined. The fluid, which very slowly trickled away, had the colour and appearance of thin chocolate, and did not coagulate. The cavity was firmly packed with lint steeped in perchloride of iron, and iron was given internally. From the mother I now heard that her boy was a "bleeder." As I have said, the case, one of hæmorrhagic diathesis, ended fatally, the boy lingering on for three days, and the loss of blood continuing.

Inclusive of this case there were performed, in all, 237 operations, with 14 deaths.

These results have not given me unmixed satisfaction. There have been errors of judgments and discoveries of differences between "cases" and living sentient individuals. The errors of judgment, in part, resulted in the sacrifice of limbs, which, with a wider knowledge and a longer experience, might have been saved, but chiefly in attempts by means of modern methods of dressing to save limbs which were ultimately, after a critical illness, useless, and a burden to the patient, and necessitated subsequent removal.

There has also been the experience of being asked to "do something" in cases which were hopeless, or almost hopeless, from extent of general injury, or from advanced tuberculosis. If our concern is to have a small mortality in cases operated upon, the decision is easily given, but there are other and more important interests, and it is difficult to resist the pleadings of the patient and the friends.

TABLE I.—AMPUTATION.

1. THIGH.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
July 8, 1883	S. C.	35	Smash of leg.	Carden (modified).	Well.
April 6, 1886	J. F.	56	Epithelioma of leg.	Do. do.	Do.
July 12, 1886	J. L.	32	Smash of thigh.	Middle third.	Do.
Oct. 1, 1886	R. S.	6	Diffuse periostitis of tibia.	Carden (modified).	Do.
Sept. 18, 1886	J. L.	10	Do. do.	Do. do.	Do.
Jan. 4, 1886	R. F.	15	Do. do.	Do.	Do.
Aug. 11, 1886	D. B.	6	Smash of leg.	Do.	Do.
July 3, 1888	E. D.	57	Epithelioma of leg.	Lower third.	Do.
Aug. 6, 1889	J. S.	16	Tubercular knee.	Carden (modified).	Do.
Sept. 28, 1889	P. K.	69	Smash of leg.	Do. do.	Do.
May 6, 1891	A. S.	2½	Tubercular knee.	Do.	Do.
July 1, 1891	D. H.	20	Smash of thigh and leg.	Middle of thigh	Died 8th July.
Aug. 10, 1891	R. F.	14	Tubercular knee.	Carden (modified).	Well.
Oct. 21, 1891	A. G.	24	Smash of leg.	Do. do.	Do.
Sept. 25, 1889	A. C.	17	Central necrosis of femur and pyæmia.	Hip-joint.	Died on third day.

2. LEG.

Aug. 25, 1884	P. C.	19	Smash of leg.	Amputation at seat of election.	Well.
Oct. 5, 1886	J. K.	48	Do.	Do. do.	Do.
June 1, 1889	A. S.	36	Smash of leg and fore-arm.	Amputation.	Death 12 hours after admission.
Sept. 28, 1889	J. K.	24	Smash of leg.	Amputation at seat of election.	Well.

3. FOOT.

Aug. 5, 1885	M. P.	28	Smash of foot.	Syme's.	Well.
April 4, 1886	J. M'K.	13	Tubercular disease.	Do.	Do.
July 10, 1886	R. S.	32	Compound dislocation of ankle.	Do. (secondary).	Do.
Sept. 12, 1886	H. C.	15	Tubercular disease.	Syme's.	Do.
Nov. 19, 1886	J. R.	31	Smash of foot.	Do.	Do.
May 28, 1886	M. G.	14	Do.	Do.	Do.
May 17, 1888	W. B.	24	Do.	Do.	Do.
Nov. 6, 1889	A. M'C.	19	Tubercular disease.	Do.	Do.
July 12, 1884	R. M.	18	Do.	Do.	Do.
Aug. 21, 1891	J. M'F.	30	Tubercular foot.	Do.	Do.

4. UPPER ARM.

Oct. 27, 1884	M. M.	8	Tubercular disease of elbow and humerus.	...	Well.
April 27, 1885	W. A.	42	Smash of arm.	...	Do.
Nov. 25, 1885	M. T.	8	Diffuse periostitis of radius.	...	Do.
Sept. 30, 1886	J. M.	15	Incised wound, involving artery, veins, and nerves in upper arm.	...	Do.
July 4, 1888	J. B.	45	Burn of fore-arm and arm.	...	Do.
July 11, 1888	W. M.	61	Cellulitis and compound fracture of fore-arm.	...	Do.

5. FORE-ARM.

Aug. 30, 1887	W. N.	23	Disease of wrist-joint and of radius.	Amputation at lower third.	Well.
Sept. 14, 1887	A. N.	30	Smash of hand and fore-arm.	Amputation.	Do.
Sept. 4, 1889	J. L.	60	Epithelioma of hand and fore-arm.	Upper third.	Do.

TABLE II.—EXCISION OF JOINTS.

1. HIP.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
Sept. 27, 1886	J. M'K.	5	Tubercular disease.	Excision.	Death from general tuberculosis.
Sept. 17, 1890	T. W.	22	Necrosis of head and neck of femur.	Do.	Death from general tuberculosis.

2. KNEE.

Dec. 7, 1889	H. B.	6	Tubercular arthritis.	Excision.	Well.
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3. SHOULDER.

Sept. 19, 1884	J. J.	36	Tubercular arthritis.	Excision.	Well.
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4. ELBOW JOINT.

July 12, 1884	W. B.	4½	Tubercular arthritis.	Excision.	Well.
May 26, 1885	M. M.	2½	Do. do.	Do.	Do.
Aug. 9, 1885	M. T.	7	Do. do.	Do.	Do.
Sept. 9, 1887	R. F.	7	Do. do.	Do.	Do.
July 23, 1888	W. C.	5	Do. do.	Do.	Do.
July 24, 1888	J. H.	4	Do. do.	Do.	Do.
April 12, 1889	J. B.	5	Do. do.	Do.	Do.
July 17, 1889	J. W.	18	Do. do.	Do.	Do.
Aug. 13, 1891	G. P.	7	Do. do.	Do.	Do.

5. WRIST JOINT.

Aug. 6, 1884	A. J.	12	Tubercular arthritis.	Excision (Lister).	Well.
Sept. 25, 1884	J. B.	20	Do. do.	Do. do.	Do.

TABLE III.—EXCISION OF TUMOURS.

1. BREAST.

Date of Operation.	Name.	Age.	Disease.	Operation.	Result.
Nov. 16, 1883	J. M.	32	Scirrhus.	Removal of breast and axillary glands.	Well.
July 5, 1884	Mrs. P.	28	Do.	Do. do.	Do.
Aug. 24, 1886	M. G.	48	Do.	Do. do.	Do.
July 24, 1888	M. W.	30	Do.	Do. do.	Do.
Nov. 20, 1889	H. M'A.	50	Do.	Do. do.	Do.
Aug. 20, 1890	Mrs. D.	42	Do.	Do. do.	Do.
Aug. 22, 1890	Mrs. W.	35	Adenoma.	Removal of tumour.	Do.
Sept. 28, 1890	Mrs. B.	42	Cystic Sarcoma.	Removal of breast.	Do.
April 4, 1891	Mrs. M.	38	Scirrhus.	Removal of breast and axillary glands.	Do.

TABLE III.—EXCISION OF TUMOURS (*Continued*).

Date of Operation.	Name.	Age.	Disease.	Operation.	Result.
July 20, 1883	M. M'M.	40	Epithelioma of lip.	Excised.	Well.
Aug. 4, 1883	W. G.	60	Epithelioma of eyelid.	Do.	Do.
June 6, 1884	M. M.	47	Epithelioma of cheek.	Excision and plastic operation.	Do.
Aug. 18, 1886	J. W.	32	Sebaceous cyst of scalp.	Excised.	Do.
Sept. 10, 1887	J. C.	57	Malignant tumour in parotid region.	Do.	Do.
Jan. 17, 1888	T. M.	30	Lipoma in clavicular region.	Do.	Do.
May 4, 1888	J. H.	69	Epithelioma of lip.	Do.	Do.
June 11, 1889	M. S.	20	Ungual exostosis.	Removal with last phalanx.	Do.
Sept. 1, 1889	M. C.	50	Epithelioma of cheek and lower jaw.	Excision of half of jaw and of tumour, and a plastic operation.	Do.
Sept. 12, 1889	P. B.	36	Epithelioma of lip.	Excised ; a month later, excision of glands under jaw.	Do.
Feb. 26, 1890	J. K.	77	Epithelioma of cheek.	Excised.	Do.
April 30, 1890	R. M.	45	Epithelioma of lip.	Do.	Do.
Aug. 5, 1890	G. W.	65	Epithelioma of hand.	Do.	Do.
Aug. 27, 1890	J. S.	49	Fibroma of tuber ischii.	Do.	Do.
Sept. 11, 1890	B. K.	60	Malignant disease of testicle.	Castration.	Death from cerebral [disease.
Sept. 28, 1890	W. U.	72	Epithelioma of nose.	Excision.	Well.
Jan. 10, 1891	W. T.	42	Loose "cartilage" in knee (inflammatory).	Incision and Removal.	Do.
Feb. 4, 1891	Mrs. M'D.	27	Fibro-cellular tumour of labium.	Excision.	Do.
Mar. 21, 1891	R. H.	72	Epithelioma of eyelid.	Removal and plastic operation.	Do.
Aug. 19, 1891	H. M'K.	58	Epithelioma of tongue.	Removal of half of tongue.	Do.
Oct. 20, 1891	J. B.	52	Epithelioma of tongue and lower jaw.	Excision of half of jaw and of tumour from tongue.	Do.
Nov. 11, 1891	P. H.	56	Do. do.	Do. do.	Do.
Dec. 6, 1891	Mrs. M'D.	32	Fibroma in neck.	Removal.	Do.
May 2, 1891	Mrs.	—	Hyrocele of neck.	Laid open and packed.	Do.

TABLE IV.—OSTEOTOMY.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
April 11, 1885	M. H.	9	Genu valgum.	Macewen's.	Well.
Sept. 19, 1887	A. W.	4	Do.	Do.	Do.
Mar. 18, 1889	R. L.	16	Do.	Do. double.	Do.
May 18, 1889	A. J.	33	Do.	Do.	Do.
May 30, 1889	P. R.	16	Do.	Do.	Do.
May 31, 1889	M. M.	...	Do.	Do.	Do.
June 8, 1889	M. T.	14	Double bow leg.	Division in each leg of femur, tibia, and fibula.	Do.
July 18, 1889	J. S.	13	Genu valgum.	Macewen's.	Do.
Sept. 6, 1890	J. S.	22	Do.	Do.	Do.
Sept. 9, 1890	L. H.	13	Do.	Do.	Do.
Sept. 10, 1890	D. L.	16	Do.	Do. double.	Do.
Sept. 22, 1890	B. S.	12	Do.	Do.	Do.
Oct. 16, 1890	M. A.	14	Do.	Do.	Do.
Aug. 16, 1891	M. G.	10	Do.	Do.	Do.

TABLE V.—EMPHYEMA.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
Sept. 13, 1889	W. K.	13	Empyema.	Resection of ribs.	Well.
* Aug. 19, 1890	M. C.	32	Do.	Do. do.	Died in December.
† Aug. 27, 1890	W. W.	35	Do.	Do. do.	Died 8th September.
Sept. 17, 1890	J. C.	19	Do.	Do. do.	Well.

* Second operation upon 19th November, pieces of two ribs being removed. *Post-mortem* examination showed extensive disease of heart, lungs, and liver.

† Died of pneumonia, which was present at time of operation.

TABLE VI.—DISEASES OF THE RECTUM.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
*Feb. 18, 1889 Aug. 21, 1891	P. F. D. M'C.	60 58	Columnar epithelioma. Do. (extensive).	Proctotomy. Inguinal colotomy, first stage.	Death from exhaustion. Death within 36 hours.

* Died on fourth day. *Post-mortem* examination showed rectum and pelvic cavity in favourable condition.

TABLE VII.—TREPHING OF SKULL.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
Aug. 3, 1886	D. M'D.	33	Depressed fracture with motor paralysis.	Trephining and elevation of fragments.	Well.
Aug. 11, 1886	G. G.	40	Do. do.	Trephining and elevation of fragments.	Do.
Sept. 27, 1890	J. M.	37	Compound depressed fracture of skull.	Elevation.	Do.

TABLE VIII.—LAMINECTOMY.

Date of Operation.	Name.	Age.	Injury or Disease.	Result.
Mar. 2, 1886	F. D.	25	Fracture-dislocation of spine with paraplegia and absence of reflexes.	Died 8 days after.
Sept. 15, 1886	P. M'G.	24	Fracture-dislocation of spine with paraplegia, 6 weeks' duration.	Died 3 months after from secondary myelitis. Plantar reflexes returned, and patient could move toes voluntarily.
Oct. 28, 1886	J. M.	25	Fractured spine with paraplegia.	Improved.

TABLE IX.—HERNIOTOMY.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
May 28, 1886	Mrs. C.	73	Strangulated femoral hernia.	Herniotomy and radical cure.	Well.
Sept. 25, 1886	J. L.	67	Do. inguinal do.	Do. do.	Do.
Jan. 18, 1889	J. B.	64	Do. do. do.	Do. do.	Died 9 days later.
April 23, 1889	Mrs. B.	48	Do. femoral do.	Do. do.	Well.
June 1, 1890	E. K.	25	Do. do. do.	Do. do.	Do.
July, 1890	A. B.	...	Do. inguinal do.	Do. do.	Do.
Aug. 29, 1891	A. F.	31	Do. do. do.	Do. do.	Do.

TABLE X.—AFFECTIONS OF GENITO-URINARY SYSTEM.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
July 12, 1883	A. M'G.	35	Retention of urine and stricture.	Supra-pubic aspiration.	Well.
Jan. 18, 1884	J. C.	7	Phimosis.	Circumcision.	Do.
July 12, 1884	A. B.	64	Urethral stricture.	Forcible dilatation.	Do.
July 12, 1884	J. H.	19	Tubercular testicle.	Castration.	Do.
Aug. 31, 1884	R. M'L.	37	Stricture of urethra.	Dilatation.	Do.
Sept. 14, 1884	H. F.	...	Rupture of urethra.	Perineal section.	Do.
Dec. 31, 1884	J. C.	7	Stone in bladder (oxalate).	Lithotomy.	Do.
April 12, 1886	A. C.	40	Stricture and perineal fistula.	Perineal section.	Do.
Sept. 5, 1886	R. T.	65	Stone in bladder (uric acid).	Litholapaxy.	Do.
Aug. 24, 1886	J. N.	58	Vaginal hydrocele of testicle.	Tapped and injected.	Do.
Sept. 2, 1886	M. B.	35	Stricture of urethra.	Forcible dilatation.	Do.
Sept. 15, 1887	W. R.	50	Urethral calculus (phosphate).	Perineal section.	Do.
Sept. 29, 1887	W. S.	56	Ruptured urethra.	Do.	Do.
July 16, 1888	D. M.	22	Phimosis.	Circumcision.	Do.
July 20, 1888	A. M'L.	29	Vaginal hydrocele of testicle.	Tapped and injected.	Do.
Sept. 26, 1890	E. M'N.	22	Fractured pelvis and ruptured urethra.	Perineal section.	Do.
Oct. 20, 1890	W. S.	5	Phimosis.	Circumcision.	Do.
Dec. 6, 1890	J. T.	4 mo.	Do.	Do.	Do.
Jan. 8, 1891	J. B.	44	Ruptured urethra.	Perineal section.	Do.
Jan. 8, 1891	G. H.	19	Tubercular testicle.	Castration.	Do.

TABLE XI.—AFFECTIONS OF VASCULAR SYSTEM.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
April 20, 1884	W. A.	42	Hæmorrhoids.	Ligature.	Well.
July 5, 1884	A. M'G.	40	Do.	Galvanic ecraseur.	Do.
July 5, 1884	N. B. L.	45	Do.	Excision.	Do.
Aug. 8, 1884	J. C.	24	Varicose veins of leg.	Ligature and excision.	Do.
Sept. 12, 1884	A. B.	10 mo.	Angioma (scalp).	Thermo-cautery.	Do.
Jan. 6, 1886	Mrs. M'A.	30	Hæmorrhoids.	Excised (Whitehead).	Do.
May 15, 1886	S. C.	16	Angioma (lip).	Excised.	Do.
June 16, 1886	A. H.	60	Hæmorrhoids.	Excised (Whitehead).	Do.
Dec. 11, 1886	A. R.	5 mo.	Angioma (scalp).	Electrolysis.	Do.
Sept. 12, 1887	C. W. G.	17	Varicocele.	Ligature and excision of veins.	Do.
June 16, 1888	A. H.	60	Hæmorrhoids.	Excision.	Do.
April 17, 1889	A. C.	53	Do.	Excised (Whitehead).	Do.
May 10, 1889	J. C.	58	Do.	Do. do.	Do.
Sept. 9, 1889	W. W.	30	Do.	Do. do.	Do.
Sept. 13, 1890	D. K.	30	Varicocele.	Ligature and excision of veins.	Do.
Sept. 19, 1890	M. S.	1	Angioma (scalp).	Ligature.	Do.
Sept. 26, 1890	J. B.	18	Secondary hæmorrhage from wound of ulnar artery near wrist-joint.	Ligature of ends of ulnar artery.	Do.
Feb. 4, 1891	J. B.	20	Traumatic aneurysm of ulnar artery.	Ligature.	Do.
Aug. 10, 1891	W. M'M.	18	Varicose aneurysm at bend of elbow.	Vessels ligatured and tumour excised.	Do.

TABLE XII.—LESIONS OF NERVES.

Date of Operation.	Name.	Age.	Injury or Disease.	Operation.	Result.
April 19, 1886	B. G.	10	Musculo-spiral paralysis following fracture of humerus, in which the nerve was enclosed in the uniting callus; 9 weeks' duration.	Nerve freed from callus.	Complete recovery of power of sensation.
Oct. 29, 1888	A. B.	14	Ulnar paralysis of eight months' duration, due to a wound in upper arm.	Secondary suture of nerve at seat of injury.	Good—almost perfect recovery of power; sensation perfectly restored.
Aug. 30, 1890	Wm. M.	12	Wound involving complete division of nerves, tendons, and 4 metacarpal bones.	Suture of nerves and tendons.	Perfect recovery.