WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL CASES AND OPERATIONS.

By CHARLES COTTON, M.D., F.R.C.S., &c., Surgeon to the West Norfolk and Lynn Hospital.

Name.	Age.	Admission.	Disease.	Duration.	Under whose Care.	Amputation.	Result.	Discharged.
John Whitmore*	22	1842 June 15	Ankle, after hæmorrhage	6 months	Mr. Cotton	Operation—out-door patient—below the knee; ligation of femoral artery	Cured	Sept. 3
Martha Turner	26	Oct. 1	Knee.	5 years	ditto	Amputation of thigh	ditto	Dec. 10
John Waters	18	Nov. 2	Dislocation and fracture of elbow, commencing gangrene	36 hours	ditto	Primary amputation of upper arm	ditto	Dec. 17
Thomas Howard	12	1843 Jan. 27	Smashed knee	recent	ditto	Primary amputation of thigh	ditto	No date
Robert Brooks†	24	April 29	Knee	one year	ditto	Amputation of thigh	ditto	May 1, 1844
Thomas Sharpin	40	May 13	Knee—Hydrarthrus	4 years	ditto	Amputation of thigh	Died phthisical	Nov. 14, 1843
Johanna Silburn	6	June 24	Knee	3 years	ditto	Amputation of thigh	Cured	Aug. 12
— Bateman	10	June 24	Ankle	3 weeks	ditto	Amputation of leg	ditto	Feb. 13, 1844
John Waters	22	1844 April 13	Wrist	1 year	ditto	Amputation of forearm	ditto	July 27
Wm. Terrington	36	Sept. 14	Elephantiasis	Some years	ditto	Oct. 7th, amputation of thigh. Nov. 12th, large secondary perineal abscess evacuated.	ditto	Jan. 3, 1845
Robert Allinson	60	Oct. 16	Compound comminuted fracture of the forearm	recent	ditto	Primary amputation of upper arm	ditto	Feb. 15
Mary Baker	30	Dec. 7. 1845	Knee	one year	ditto	Amputation of thigh after bleeding	ditto	March 22.
Ezekiel Callaby	26	Feb. 15	Knee	4 years	ditto	Amputation of thigh	ditto	Aug. 23.
Tim. Robinson	18	April 29	Knee	12 mths.	ditto	Amputation of thigh	ditto	Dec. 22
Robt. Chinnery	40	May 10	Knee	6 years	ditto	Amputation of thigh	ditto	Aug. 23
John Sterne	13	Nov. 20	Open wrist joint and laceration	recent	ditto	Primary amputation of forearm	ditto	Feb. 14, 1846
Stephen Gagen	17	July 4 1846	Extensive necrosis of leg bones following peritostitis.	1 month	ditto	Amputation of thigh	ditto	Nov. 24.
James Fysh	14	Aug. 17	Smashed wrist and elbow, laceration of soft parts extending to shoulder	recent	ditto	Primary amputation of shoulder-joint	ditto	Nov. 4
Frances Taylor	28	Aug. 22	Smashed leg and ankle bones, laceration of soft parts, lesion of vessels after bleeding	recent	ditto	Aug. 22, primary amputation below knee. Aug. 30, ligation of femoral artery	Died	Sept. 7
John Burrell	13	July 21	Gun-shot wound.—Hand and carpal bones	recent	ditto	Partial amputation of hand, extending into wrist	Cured	Sept. 4
Saml. Andrews	33	July 8	Crushed fingers	recent	ditto	Amputation of four fingers	ditto	July 27

Other Amputations of fingers and toes { traumatic lesions 4 } 7 cured.
 { chronic affections 3 }

* Mr. Rackham, the Resident Surgeon, kindly furnished the abstract of operations falling to my charge, beginning with Whitmore's case, to September, 1846, from which the above table of amputations is taken. From June, 1838, the period at which I first became connected with the Hospital, to September 3rd, 1842, the discharge of cases was entered without any reference to operative procedure.

† The correct dates of the days on which the amputations took place, or of the patients being placed on the out-door list cannot be ascertained.

‡ Brooks re-entered the Hospital February 14th, 1846, upwards of two years after he had undergone amputation, with vertebral abscess, said to have been observed six weeks. He left May 11th, and is reported as being lately dead, Nov. 30th, 1846.

I have just read Professor Syme's communication upon "Amputation of the Thigh".* My "opportunity of observation" may not have been "sufficient" to justify my expressing an opinion in opposition to the alleged "undeniable facts" of so high an authority; nevertheless, the results of the above-named amputations, and of many others which I have witnessed and conducted in public and private practice, have not impressed me with the fear of mischief arising from the exposure "of dense bone, together with the contents of its medullary cavity," or of "the frequent deaths from the effects of separation of the thigh at its centre."†

In each amputation the flap method was "indiscriminately" adopted; the flaps were generally considered, *sat superque*, ample; they were always well held back and the bone exposed and sawed. After sweeping the knife around it through the muscles at a point higher than their simple seat of separation, and for the sake of better security against after hæmorrhage, the main artery was mostly freed for a small distance from its surrounding connections previous to the application of the ligature. In no one instance did the stump ultimately prove "unseemly or inconvenient;" for, although the bone at first deeply imbedded within the muscles, after a time frequently appeared to be covered by little more than skin; yet, as has been often remarked, its protection was usually secured by the surrounding bold and projecting muscular and integumentary cushions.

In largely developed muscular limbs, from the extent of surface requiring to be exposed, and the difficulty I have sometimes witnessed and experienced in securing the vessels, particularly in amputations immediately below the knee, it has struck me that in forming the flaps the muscles might be advantageously transfixed less deeply, and the operation completed by circular incisions. Whether circular amputation at the lower third of the thigh, "where circumstances afford room," ought to supersede the division at its centre, as advised by Mr. Liston, for securing the most efficient and convenient stump, time and experience must decide. Influenced by a desire to divide the soft parts as little as possible, and spare blood, I adopted the plan in one case, that of Timothy Robinson, an adult youth, much exhausted by long disease; the recovery owing to constitutional fault, though tedious, was complete, and he experiences now no inconvenience from the length of the remaining limb.

Should it be hereafter determined that the place of election (circumstances permitting,) may be best chosen at the lower third of the thigh, but few, I suspect, will feel inclined to relinquish the flap operation in favour of the modified circular method recommended by Professor Syme.

Although Professor Syme now frankly ceases to advocate sawing through the condyles of the femur, his three successful cases of amputation at the knee, in two of which the joints were diseased, coupled with the favourable results (twenty-one out of twenty-four,) of his tibio-tarsal amputations are, nevertheless, of the highest value. These, together with the joint-amputations of M. Blandin; the recent successful

excision of the head of the femur, by Professor Ferguson;* that also of the head of the tibia and condyles of the femur, by Dr. Gordon Buck;† and the invariable rule of practice laid down by M. Bonnet,‡ and attested by published cases,—that, in all vicious positions of the knee, owing to acute or chronic disease, no matter the stage, inflammation and pain are allayed by straightening the limb—do not, in my humble opinion, justify the extreme fear of interference with the larger joint-ends of bones, or their diseased articular surfaces, so generally entertained.

During the last two years, in three cases of synovial distension of the knee, occurring quickly, and extending upwards beneath the muscles of the thigh, one from an arthritic attack, I have tapped beneath the muscles, and let out the fluid without inconvenience. Since January last I have, by straightening and fixing the limb upon a M'Intyre splint, treated successfully three cases of advanced disease of the knee in adults, attended with considerable effusion into the articular cavity, thickened and distended synovial membrane, and probably damaged cartilages; with permanent semi-flexion of the leg. A fourth case, a boy, under treatment, and at present doing well, was admitted into the hospital exhausted by hectic fever and incessant diarrhoea, and during the extension the integuments in the ham yielded, and were widely separated.

I have witnessed and experienced such excellent effects from the use of the trephine in cases of scrofulous caries of the shaft and extremities of the tibia with implication of the joints, that I think this instrument may be frequently and advantageously employed in such cases, as well as in those of thickening of the bone with severe intermitting pain, &c., recommended by Sir B. Brodie. In the case of a boy about to leave the hospital "cured," with an apparently sound limb, having been under treatment since September, 1845, and twelve months previous to entering it, for enlarged head of the tibia, effusion around the joint thought to be within it, partial necrosis of the shaft, ulceration of integuments, greatly thickened periosteum, (*a condemned knee*.) I pierced the shaft with the trephine twice, and removed portions of carious bone, and applied it once also to the head of the tibia, and gave exit to a perfect pool of sero-purulent matter, apparently proceeding from an abscess within the cancellated structure. A seton carried close to the side of the joint, supporting the constitutional powers, &c., in spite of an attack of phlegmonous erysipelas, served to complete the at present cure.

My experience has been limited, and my boldness may expose me to censure, but I am, nevertheless, enthusiastic enough to believe that the progress of disease may be arrested, the leg in several cases saved, and amputation for diseased knee rendered unnecessary, by at once correcting the vicious position selected by the patient and keeping the limb scrupulously immoveable by the more frequent use of the trephine, and in open joints, by attempting the cutting out of the diseased parts.

SECONDARY HÆMORRHAGE.

June 15th, 1842. John Whitmore, agricultural labourer, admitted into the Hospital with diseased left ankle of six months' standing.

* *Edinburgh Monthly Journal*, Nov., 1846.

† *Edinburgh Medical Journal*, May, 1845; also *Medical Gazette*, October 17th, of same year, with Editor's judicious remarks.

* *Med. Gazette*, No. 12, 1845. † *Med. Times*, No. 2, 1845.

‡ Forbes' "Quarterly Review," January, 1846.

July 11th. Amputation immediately below the knee by flap method. Considerable bleeding occurring on the patient being removed to bed, an additional ligature was applied to a vessel deeply seated within the interosseal space.

14th. Stump ill-looking and doing badly.

15th. Stump sloughing and gangrenous; slight hæmorrhage, which yielded to cold applications and exposure.

17th. Hæmorrhage to an alarming extent; patient pale, cold, and exhausted. On Mr. Cotton's arrival a ligature was at once placed around the femoral artery at the middle of the thigh, the stump enveloped in wadding, and the temperature regulated by bottles of hot water. A comforting draught, with twenty drops of Battley's sedative, was given shortly after the operation.

23rd. Sloughs thrown off, leaving a healthy granulating surface. To be dressed with simple cerate.

The ligature came away on the 14th day. In about a month the man was made an out-patient, and discharged finally cured September 3rd.

Mary Baker, aged 30, housemaid, admitted Dec. 7th, 1844, with diseased knee, of eight years' standing.

January 3rd, 1845. Amputation at the middle of the thigh by antero-posterior flaps.

4th. Weak, feverish, and watchful. Ordered a diaphoretic saline and a draught of Battley and æther at bed-time.

11th. Considerable hæmorrhage of a dark colour. Consultation held. The oozing of blood continuing, the flaps, (which were rather abundant, and much distended, and held together by little more than the strapping and bandage which surrounded them,) were freely separated to the end of the bone, and a quantity of dark blood, with several coagula in which it was imbedded, was turned out, and the wound gently cleansed and exposed. After waiting two hours, and no further bleeding recurring, it was closed, and a bandage applied. *R. Liq. Opii Sed., m. xv. e Julep. Camph. statim; hora somni repetend. si involverint vigilæ. R. Acid Sulph. Dilut., m. x.; Spir. Æth. Sulph. Co., m. xv.; Potassæ Nitratis, gr. x.; Syr. Aurantii, dr. ss.; Aquæ, oz. iss. M. Fiat haust. quarta quaque hora capiend.*

From this time the well-doing of the patient was rapid and complete. In six weeks she was made an out-patient, and was discharged cured March 22nd.

Frances Taylor, aged 28, admitted August 22nd, 1846, with a compound comminuted fracture, longitudinal and oblique, of the left leg, smashing the ankle, and extending to the middle third of the tibia and fibula, extensive laceration of soft parts, and lesion of vessels, caused by a thrashing machine. The accident happened about two hours before admission, and was attended with considerable bleeding, which was restrained by the medical gentleman who first saw the case, and who considerably accompanied her to the Hospital, a distance of seven miles. Amputation being determined upon in consultation, the usual flap-incisions were made, and the leg bones sawn through close to the knee. The operation, performed much against the patient's wishes, was borne well; no great quantity of blood was lost, although some difficulty was experienced in securing an interosseal branch of the artery; the posterior flap,

rather too exuberant in muscle, was brought by sutures into pretty good apposition with the anterior, and owing to a disposition of the stump to weep, a bandage was applied. Low diet.

24th. Catamenia present; frequent and forcible palpitation of the heart; cannot sleep; no pain or uneasiness. Ordered an effervescing saline, with syrup of poppies. Arrowroot and pudding.

26th. Menstrual flow profuse; pulse frequent, easily compressible; skin hot. Has not slept, nor have the bowels been moved since the operation. *Habeat Inf. Sennæ, dr. vj.; Tinct. Rhei, dr. ij., pro haust statim sumend., et postea. injic. enema communisi opus sit. R. Extr. Opii, Hydr. Chlorid., utrque, gr. ij. Fiat pilula hora somni sumenda. R. Liq. Animon. Acet., dr. vj.; Spt. Æth. Nitrici, Vini Antim., Syr. Simpl. sing. dr. ij.; Aquæ, ad oz., vj. Sumat partem quartam bis quotidie.*

27th. Has slept well; bowels relieved; circulation still hurried; stump cedematous and unhealthy; two or three gangrenous vesicles upon its posterior aspect. Warm water dressing. Full diet.

30th. Erysipelas gangrenosum has attacked the stump. Complaints of the excessive heat, and of being tormented by flies and innumerable maggots, which, in spite of every precaution, have irritated and eroded the skin of the back and nates. Moved to another bed.

31st. Awoke at 5 a.m. Alarmed by a "trickling of wet" down her thigh, and at finding her night-dress and the bed-clothes saturated with blood; became faint; a small quantity of blood has escaped upon the floor. Further bleeding was prevented by Mr. Rackham, by removing the dressings, the application of cold, and exposing the stump.

11 a.m. A slight recurrence of hæmorrhage; feels faint. Half a pint of porter ordered.

1 p.m. Consultation. The stump sloughing and offensive; ~~was~~ elevated; left exposed after a quantity of pus and blood had been forced by gentle pressure from within the bottom of the inferior flap. "The artery to be ligatured, should hæmorrhage again happen."

R. Tinct. Opii, m. v.; Tinct. Hyosec., Vini. Antim., m. x.; Aquæ, oz. iss.; cum Potass. Citrat., utrque, dr. ss. tertia vel. quarta hora act. effervesc. capiend. Porter countermanded.

September 2nd. Feels easy and comfortable; the pulse 112, frequent and wavy; appearance of the stump improved; sloughs separating.

4th. Stump again sloughy and gangrenous. Owing to the insupportably offensive state of the bed from maggots, &c., the patient was again obliged to be removed to another bed.

5th. 11 a.m. Hæmorrhage again recurring, the medical officers were summoned, and Mr. Cotton, immediately on his arrival, (in the presence of Dr. Wayte, Dr. De Mierre, and Mr. Rackham,) ligatured the femoral artery at the middle of its course. The operation, the limb being simply rotated outwards, was quickly and easily accomplished, with the least possible disturbance of the vessel. The limb was encased in wadding and surrounded with oil-silk, although the forcible impulsion of the column of blood against the ligature, created a fear of recurrence of bleeding, from the collateral circulation. Jelly, cool arrowroot, wine, negus, &c.

Sum. Tinct. Opii, m. v., e Syr. Aurantii, dr. j., omni quarta hora.

6th. Frequent diarrhoea during the night and this morning; pulse weak, 120; gangrene progressing on each side of the knee.

R. Salicinæ, gr. iss.; Conf. Aromat., dr. ss.; Syr. Papav., dr. j.; Aquæ Cinnam., oz. iss. M. Fiat haust. tertiis vel quartis horas capiend. Yeast poultices. Pil. Opii cum Calom. hora somni sumend.

7th. 9. a.m. Skin cold; partial sweats; pulse quick and feeble; has vomited. Turpentine stupes to the stump.

R. Ammon. Carb., gr. x.; Tinct. Opii., m. x.; Syr. Simpl., dr. j.; Aquæ, dr. xi.; statim sumend.; post horas sex semel rept.

3. p.m. Died.

A *post-mortem* inspection the following day (Mr. Cotton was unavoidably absent,) shewed the artery effectually secured by the ligature, the structures adjoining undisturbed. The disorganized state of the knee prevented the point from which the bleeding occurred being detected. *The upper lobe of the left kidney was occupied by a thick cartilaginous-like cyst, the size of a walnut, containing pus.* Nothing else remarkable was observed.

(To be continued.)

CASE OF POISONING BY THE CHLORIDE OF ANTIMONY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I send you the following case of poisoning by muriate of antimony if you have room for its insertion in the Journal.

I am, Sir,

Yours faithfully,

THOMAS BANCKS, M.R.C.S.

Stourbridge, Worcestershire,
December 9, 1846.

I was summoned on the 16th November, 1846, to A.B., a little boy, aged 7 years, who had swallowed two drachms of muriate of antimony given by a druggist in mistake, who immediately discovered his error, and applied to me to see the child. I found him with exoriation of the mouth and fauces; skin cold and clammy; pulse small and accelerated; burning pain in the epigastrium; tumefaction of the bowels and incessant vomiting. I went prepared with the antidotes, and lost no time in administering them. Having dissolved an ounce of magnesia in a quart of water, I made him drink every moment there was a cessation of the vomiting, until I was satisfied at last that a sufficient quantity remained to neutralize the poison. At three p.m., I commenced giving him the decoction of yellow cinchona, and strong tea, and continued it at intervals until eight p.m., when there appeared much less pain in the epigastrium although a good deal of febrile action was going on. The plan of treatment now adopted was the antiphlogistic, tea and mild diluents, and an enema ordered should the bowels not act soon.

17th. Still complains of pain in the epigastric region; bowels have acted; febrile symptoms much the same,

18th. He is evidently better; bowels acted well; febrile symptoms better. Continue antiphlogistic plan.

19th. Continues to improve; there is less anxiety of countenance, and he is inclined for food.

20th. He continues to go on favourably and is out of danger.

For the next few days he continued to improve, and was soon in perfect health again. I should not omit to mention that the child had taken no food on the morning he swallowed the muriate of antimony, a circumstance rather against the chance of recovery, after so powerful an irritant poison.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, DECEMBER 23, 1846.

We observe from a paragraph in a respected contemporary, the *London Medical Gazette*, that fever of an infectious kind has been prevailing to a great extent at Upton, a village in Berkshire. The fever is said to have manifested itself about six weeks ago in a cottager's family, and from the time of its first appearance, up to the end of November, no fewer than thirty-two deaths occurred in a population of 150, the disease being at that time still raging. The deaths were chiefly among the labouring class of the inhabitants, and this great mortality is ascribed to "difficulties in procuring medical attendance at such a desolate place of abode."

We have no personal acquaintance with the locality alluded to, but on referring to topographical works, we find that the chapelry of Upton, in Berkshire, which is, we presume, the village alluded to, is distant only four miles and three quarters from East Ilsley, a market town of some importance in the county, where a petty sessions is held once a fortnight. That there should, under such circumstances, have been any difficulty in procuring proper medical attendance, is inexplicable, and if the great mortality of the fever be really attributable to any want of such attendance, gross neglect must have existed somewhere, and the Poor-Law authorities be highly culpable. It is impossible that one-fifth of the inhabitants of a rural district could have been carried off in the short space of a month without its coming under the notice of the parish officers and guardians, and if their arrangements for medical attendance were insufficient to meet the calamity, special provision ought to have been made without delay for procuring such assistance from the neighbouring towns.

It is stated that the cause of this calamity is so clearly manifested that the authorities have not deemed it necessary to institute any inquiry, and that the only mystery is that the contagion should have shewn itself in a situation where the climate