away on the *seventeenth day*, and the patient was allowed to sit up in bed. On the twenty-sixth day after the operation, a second venous hemorrhage took place, and was of a very alarming quantity. No certain cause could be ascribed for this. And it was, like the first, followed by an abscess, this time extending some distance below the clavicle, without any definite circumscription. This was also punctured at the most dependent point, and the large cavity washed out with carbolic acid diluted. The patient, being very much depressed in spirits by the alarm caused by the large loss of blood, was encouraged to be dressed and walk about the room, as all danger of hemorrhage from the ligated vessels was by this time impossible; she soon rallied in health and spirits. The discharge became perfectly healthy, the wound speedily filled up with granulations, the surface rapidly cicatrized over, and she was soon able to leave the house and take exercise in the open air.

It is now eleven months since the operation was performed, and Miss J. is in as excellent state of health as she has ever enjoyed; the scar being very much diminished and healthy in appearance, showing no indication whatever of any likelihood of a return of the morbid growth which so greatly disfigured her, and so fearfully and speedily threatened destruction of her life.

In a previous case in which I operated, in April, 1845 (*vide Notes to McClellan's Surgery*, p. 334, etc.), the very great extent of the tumour necessitated the ligation of the *internal carotid*, as well as the division of the *par vagum*, or *pneumogastric* nerve, and also the *spinal accessory*.

The patient entirely recovered without any bad effects from the division of the *pneumogastric* nerve. This only can be accounted for on the supposition that the pressure of the tumour had *already destroyed the function of the nerve cut*, and that nervous connections, or anastomoses, enabled its symmetrical companion to perform its office.¹

ART. IX.—*Spinal Contusion with Fracture of Femur, resulting from a fall from aloft; Recovery.* By WM. A. CORWIN, M.D., Assistant Surgeon U.S.N. (Communicated by the Surgeon-General U.S.N.)

HENRY CROWIN, an ordinary seaman, twenty-two years old, fell from the main truck of the flagship Colorado, a distance of nearly two hundred feet, on January 25, 1872, while that vessel was lying in the harbour of Hong Kong, China.

He was engaged at the time in "blacking down the main royal black-stay," which procedure necessitated his swinging himself from the stay, a medium sized wire rope, leading down, almost perpendicularly from the truck to the side of the ship, and it was at the moment of his attempt at

¹ *Vide McClellan's Surgery*, 1848, edited by Dr. J. H. B. McClellan, notes to pp. 331, 332, 333, 334, 335, 336, and 337. Also, first edition of Velpeau's *Operative Surgery*, 1846, pp. 427-8.

swinging from the stay that the accident occurred, the poor fellow sliding down the slender rope with fearful velocity. Breaking, in his descent, one or two small lines, which led from the stay, and which parted like burnt tow under his weight, he struck the hammock netting, and rolled from thence to the deck, some twelve feet below.

Passed Assistant Surgeon Wells, U.S.N. and myself, saw the patient immediately, and found the following injuries; an oblique fracture of the left femur at its middle third with what we afterwards determined to be severe contusion of the spinal cord; in addition to which, the right shoulder was badly bruised and various other bruises and abrasions were found on the arms and legs.

Spinal contusion was diagnosed from the existence of pain and exquisite tenderness on pressure, over the third lumbar spinous process, co-existing with total loss of motion and nearly complete absence of sensation in both lower extremities, the loss of sensibility being marked in the skin of the perineum and scrotum. We could obtain no evidence at the time, nor afterwards, of vertebral displacement or fracture. There was, also, complete paralysis of the bladder and rectum. No marks of injury were found about the head, and no evidence of injury to the brain other than slight symptoms of concussion, which passed gradually off leaving no sign. He replied to questions when addressed, but immediately after re-leased into a somnolent state. There was no vomiting, the pupils were normal, as was the respiration, skin cold, pulse full and 100. He was placed in a cot, and anodyne doses morphine sulphat. prescribed.

On the second day, reaction was in full progress; pulse 134 and full; respiration hurried; tongue slightly furred and temperature normal. The mental torpor was now in great degree gone, and instead, he exhibited a slight obtuseness or indifference to what was passing around him, due probably to the opiates taken. No change in the condition of the paralyzed parts. The urine, drawn off by catheter, seemed to be more copiously secreted than in health, and deposited urates in abundance. It was also slightly albuminous; this, however, was a temporary condition only. He drank quantities of water, but could not be persuaded to eat. There had been no evacuation of the bowels since his fall. It was resolved to defer the application of all retentive apparatus as long as prudence would allow. The anodyne was ordered to be discontinued, and small doses of aromatic spirits of ammonia in a dessertspoonful of sherry wine were given three times a day. This, however, had to be discontinued on the third day, as it became apparent that he could not bear stimulus as yet, however moderate. Potass. bromid. in small doses was administered on the third day, with happy effect, as he at once began to improve in his mental state and his pulse and respiration approached healthful conditions.

On the sixth day all medical treatment was omitted. There had been as yet no action of the bowels, though purgatives and stimulating injections had been employed. This constipation gave us no great concern, however, as he had eaten but very little of the lightest food since his illness. The urine had lost its high colour, but was still excessive in quantity (from four to six pints daily). The catheter was constantly used, and the patient did not feel its introduction into bladder. Here I may mention a simple device which I employed, to save the patient the pain and annoyance of being turned upon his side whenever the catheter was used. About three feet of small rubber tubing was obtained and attached to the ivory ring at the open end of an elastic catheter (No. 12.), the ap-

paratus forming a syphon. The instrument being introduced with the tube hanging over the side of the bed into a vessel, the natural elasticity of the walls of the bladder starts the stream, which is then constant until the viscus is emptied, and no disturbance of the patient's position is necessary. This simple arrangement, the materials of which are always easily obtainable, saved our patient much annoyance, ourselves much trouble, and will prove, I hope, of use to the profession generally.

On the eighth day, our patient was moved from the "sick bay" to the gun deck and placed upon a stationary cot made for him, the canvas mattress of which was pierced with a considerable aperture in case of involuntary stools. Back's extension apparatus, with lateral splits to the thigh, was then applied to fractured limb, commencing with ten pounds extension. Patient expressed himself as very comfortable. Bowels still constipated, responding but mechanically to injections and seemingly not affected by cathartics. Pulse 112, soft; appetite poor, tongue still coated with a thick brown fur, and patient sleeping poorly. Some congestion appearing about the buttocks, a lotion of alcohol and water, equal parts, was ordered to be sponged over the parts daily. Bladder still relieved by catheter, and urine somewhat diminished in quantity.

On the eleventh day, our patient was cheerful, taking interest and notice of whatever transpired about him. Bowels still constipated, and condition of paralyzed parts unchanged. Alcohol lotions continued to his back, and the following was ordered: *R. Strychniæ colphot., gr. ij; opniæ puræ, ℥viii. Solve. Signa, ℥ss, ter die.*

12th day. Slept very well last night; otherwise no change. Sol. strychniæ sulph. (each dose, gr. $\frac{1}{4}$), was continued, and one pint of ole allowed daily, with continued application of alcohol and water to back.

13th day. Slight conjunctivitis of right eye, indicative of vital depression. Treatment continued.

14th day. Small bed sore on nates, right side. Pulse 96 and soft. No action of bowels yet. Carbolic oil (acid carbolici, crystal, pars i; Olei olivæ, partes xx. M.), was ordered as a dressing for bed sore, to be applied on lint and renewed twice daily. Other treatment continued. Croton oil, gr. ij, was administered in pill form, and extension maintained at ten pounds.

15th day. No response from cathartic. Conjunctivitis severs. Commencing œdem of right leg, for which roller bandage was applied. No distension of abdomen or other evidence of fecal accumulation upon external examination. Ordered a collyrium, plumbic acetate, and to have his treatment continued.

16th day. Slight change for the better. Some return of sensation in right leg; voice seems a little stronger. Bowels still constipated. Pulse 100 and soft. Measurement of the fractured limb to-day showed slight shortening ($\frac{1}{2}$ inch). The extension was accordingly increased five pounds. Sponging the back and notes with spirits and water, administration of strychniæ sulph., with ale and special diet continued.

17th day. Sensation continues to improve in lower extremities, and patient is commencing to regain motion in the right leg. When told to raise his thigh from the bed, the quadriceps, sartorius, and adductors are seen to contract, irregularly, but he cannot accomplish the desired motion. Bowels still unrelieved. Bladder irritable, requiring to be frequently emptied, and the urine is somewhat offensive, normal in quantity, and high colored. Bed sores on both notes. That on right side is as large as the

palm of the hand, that on left side, small. Ordered to continue the thorough sponging of the parts around ulcers, the latter to be dressed twice daily with carbolated oil. Other tonic and supporting treatment, with special diet to be continued.

18th day. Losing ground from nearly total want of appetite consequent on extreme constipation of the bowels. Pulse 100, but reduced in volume and strength. Restless and irritable. Tongue coated and conjunctivitis persists. Previous regime continued with special diet. In addition he was ordered, R. Ol. crotonis tig., gr. ij; ol. ricini com. f5vj. M. Signa, Statim summandus.

19th day. The cathartic administered yesterday operated several times during afternoon and evening. (I have often had occasion to notice the greater *certainly* and *mildness* of action of croton oil when combined with castor oil, producing effects which neither agent could cause alone.) General improvement in symptoms. Extension carefully maintained and treatment continued.

21st day. Progressing fairly. Emaciation great. Appetite improving. Sensation nearly restored in right leg and improving daily in left. Motion also continues to improve slowly. Substituted sherry wine for ale, allowing f5ij ter die. Cod-liver oil, with other treatment local and general continued.

23d day. Conjunctivitis diminishing slowly. Bedsore on right side covered with large blackish slough. Sensation in some parts of lower extremity now nearly normal. Patient states that the passage of catheter along urethra gives him slight pain now. Substituted fresh beef for chicken broth, and ordered general treatment to be continued.

29th day. Very little change since last report. The slough separated last night from larger bedsore. Both sores are now granulating with profuse discharge, which is very debilitating. The carbolated oil is still applied on lint and a small quantity injected into the cavities of sores every morning. Bowels again torpid. Patient is in excellent spirits. Appetite fair. On measurement, the fractured limb is found to be of equal length with sound leg, and uniting in the most satisfactory manner. From the great emaciation incident to long confinement to bed and exhausting discharges, the provisional callus about fractured bone can easily be felt upon manipulation. Wine, cod-liver oil and sol. strychniæ sulph. continued, with same dressing to bedsores. Extension still maintained without lateral splints to thigh.

32d day. Had an attack of dyspnoea last evening about ten o'clock, which, however, yielded to a small dose of chloric ether. Bowels still torpid. Pulse 85 and of good strength. Ordered the sol. strychniæ sul. to be discontinued, and substituted ferri et quin. citrat., gr. x, ter die. Instead of sherry wine, to have whiskey, f5ss, ter die, with the cod-liver oil. Special diet continued with dressings to bedsores.

35th day. Improving generally. Bowels were freely moved yesterday, by ol. ricini. General treatment continued.

43d day. Continues to improve slowly. Removed all apparatus from fractured extremity. The thigh had united firmly in a right line, and without the least shortening. General stimulant and nourishing regime still continued. Bedsores closing slowly.

49th day. Bladder regaining tonicity and patient doing well in all respects.

On the 21st of March, the 56th day, our patient convalescing, it was

deemed advisable to send him ashore for the change in air and diet. Quarters were accordingly obtained for him at the Seamen's Hospital, Hong Kong. He had now, in some measure, reacquired power over the bladder, and has since quite dispensed with the catheter. The bedsores were still discharging somewhat, but were nearly closed. Sensation and motion were quite normal in the right lower extremity and much restored in the fractured limb, though much of the weakness remaining in his limb was probably due to the long continued extension. His appetite was excellent, bowels quite normal, and spirits good, and he is now on the highway to perfect recovery.

So wonderful an instance of recuperative power is but rarely chronicled. Buck's apparatus seems to be one of the best for naval surgical practice. It is expeditiously applied, occupies very little space, the necessary cords, pulley, and weight are always obtainable on ship-board, it is not in any way disarranged by the motion of a ship at sea, and, lastly, gives as good results as any other method of treatment.

During the first week of patient's illness a fatal result seemed so certain that it was deemed, in consultation, to be worse than useless to apply any apparatus to the fractured limb, as the disturbance would probably hasten the end and could do the patient no present good. On second thought, however, the injustice of omitting any precautionary measure, that might, in the event of our patient's surviving, forever disable him, was given a due consideration, and the result was, that, with the approval of Medical Inspector H. O. Mayo, U.S.N., and Passed Assistant Surgeon Wells, U. S.N., the extensio apparatus was applied.

I need scarcely say that the results of treatment in this case, aided as it was by youth and an excellent constitution, have far exceeded our most sanguine hopes. Our patient's recovery from such terrible injuries certainly verifies the maxim, that "while there is life there is hope."

U. S. FLAG SHIP "COLORADO," HONG KONG, CHINA, March 29, 1872.

ART. X.—Cancer of the Stomach with Extension of the Disease posteriorly; marked by a peculiar diagnostic feature rarely met with.
By ROBERT P. HARRIS, M.D., of Philadelphia.

THE mobility of the abdominal organs, and in many cases the absence of marked symptoms by which we may determine the character and extent of abnormal growths within the peritoneal cavity, render the diagnosis of abdominal tumours exceedingly difficult, and give value to every feature of a truly pathognomonic character. Strange as it may appear, patients have died of cancer of the stomach, where there had been no symptoms during life to lead the medical attendant to suspect that such a disease