general, which should constitute a valid objection to the use of chloroform in an operation which is advisable in such a state of health. More care may be needed in one subject than in another; but this may be said of almost every medicinal agent powerful enough to be worth anything.

The "accidents", as they are called, which have happened now and then, have arisen, in many cases, I think,—I hardly like to utter my fears—from some want of care in the person giving it. If the administration of it is intrusted to you, take care that your attention, while students, and hereafter as practitioners, of surgery, does not wander from the patient's chest, and your finger from his pulse, to the more interesting features of the case, lest you smother the patient with the napkin on which you dropped some small dose of the drug. Remember, such a death must not be set down to the chloroform which was at first put on the napkin.

The staff having been introduced, the hands and feet bound together in the usual manner, and the patient brought under the influence of chloroform, the lateral operation was performed.

If the surgeon could rely on his assistants to keep the patient's thighs properly abducted and flexed on the abdomen, so as to expose the perineum sufficiently, he might with advantage dispense with the customary formality of binding the hands and feet together—a proceeding to which it may be objected that the forced position of the hand, and the garter round the wrist, hinder the assistant giving chloroform from feeling the pulse, and that the patient, when brought under chloroform, often loses his hold of his feet and slips from the exact position in which he was at first placed on the table, thus causing the operator to pause before completing the incision into the bladder. To put the garters on well requires a good deal of care.

It is also of importance that the staff should be held properly. When it has been passed into the bladder, and the stone felt with it, when the garters are safely bound, and the patient under the influence of chloroform—you may stand at his right side or his left—if the staff is entrusted to your care, hold it firmly by the handle, and take care that the beak is in the bladder.

In the boys the operation was done with the knife I have generally used—a scalpel with the back rather straighter than the one known among cutlers as "Key's knife." In the man, after opening the urethra with this scalpel, the incision into the bladder was completed with another having a blunt beak at the point. I did not wish to run the risk of doing harm by thrusting a sharp-pointed knife into the bladder through so deep a perineum. In the second boy, the rectum was wounded by the knife slipping from the staff after the urethra was opened. When such an accident happens, if the opening in the gut is not large, and if no other mischief is done, the wound generally heals well. Some urine finding its way into the rectum may irritate the mucous membrane (in this case it may have increased the tendency to diarrhoea); and faecal matter passing through the wound may perhaps delay the healing. No other inconvenience was felt here.

In the man it might be said, as far as the mere operation is concerned, that it was successful. The stone was removed without any mishap, and he did not suffer any "shock" from the immediate effects of it. Yet after the first twenty-four hours it seemed pretty clear that he would sink.

The old surgeons on visiting a patient after the operation of lithotomy, were in the habit of asking, "Does he wet well?" Their attention was directed to the secretion from the kidneys as one of the most important signs of a successful event. This man did not "wet well." Very little urine was secreted after the first twelve or fourteen hours—a clear indication that whatever inflammatory action was in progress in the kidneys was increased. In such a state of disease, any surgical operation—especially on the urinary organs—is attended with great danger; a low form of erysipelatous inflammation, with peritonitis (of which an early stage was seen here), is particularly to be

feared. It is not unlikely that the continued and increasing discomfort produced by this state of kidneys was (as much as the calculus) one great cause of his at length seeking advice; and much of his irritable temperament may have been dependent on such a state of health.

If the kidneys had been sound, would the man have recovered? The question is suggested by the examination of the body. The small calculus encysted in the bladder would not have hindered recovery; though it might have rendered another operation necessary at a future time. The question arises from the appearance of the cellular tissue—the modern areolar and adipose tissues—about the bladder, behind the peritoneum. The short time snatched for the examination, and the way it was of necessity made, hindered us from making such a dissection of the perineum as would have shown whether that most important structure, the deep fascia of the pelvis, was opened. It was not wounded by the knife, but probably it was torn in drawing the stone through the prostate; thus allowing the effusion of blood, and possibly urine also, to pass freely into the surrounding cellular tissue. Profuse suppuration would be the certain result, and, perhaps, fatal peritonitis.

It may, I think, be fairly doubted whether so large a stone, even if happily seized lengthwise, in its smallest diameter—that diameter being increased by the thickness of the blades of forceps powerful enough to hold the stone in its chops—could be drawn through the prostate without tearing open the deep pelvic fascia.

You will not pass through life without having frequent occasion to administer chloroform, to pass a catheter, or to sound a patient; and you may be called upon to assist at the operation of lithotomy, to bind the garters, or to hold the staff. To these necessary adjuncts, therefore, requiring abundant surgical skill, you should direct attention, rather than to the difficulties of the mere operation itself of lithotomy, which, in all likelihood, few of you will ever be called on to perform. The after-treatment of this, as of other great operations, may be left to you; and to that you must give attention in the wards.

WORCESTER GENERAL INFIRMARY.

CASES OF FATAL OBSTRUCTION OF THE BOWEL BY CANCEROUS DEPOSIT.

Under the care of J. MALDEN, M.D., and H. D. CARDEN, Esq.

[Reported by ERLIN CLARKE, M.B., House-Surgeon.]

CASE I. Elizabeth Philips, aged 76, was admitted under the care of Mr. Carden, Jan. 12th, 1856. She was exceedingly emaciated, and her countenance had the peculiar appearance associated with malignant disease. She applied for advice in consequence of a painful tumour situated in the epigastrium, which she said had existed for some years, but had not been troublesome till about ten months ago. On examination, it was found to be of the size of a small orange, moveable, and apparently situated in the subcutaneous cellular tissue. The skin over its apex was adherent, much thinned and congested, but the tumour itself was firm and elastic. Other similar tumours were found in various parts of the trunk, in a less advanced stage, some of them no larger than small peas; the mammae were shrivelled, but healthy in appearance, and there was no evidence of disease in any of the lymphatic glands. The abdomen was prominent, and its walls somewhat tense, the intestines containing a good deal of flatus; she said that for some weeks her bowels had been more or less constipated, and that she had occasional attacks of pain in the abdomen. A dose of castor oil procured a small stool.

Jan. 14th. Tympanitic state of abdomen increased, but the bowels have acted very slightly.

Jan. 16th. Vomiting of the contents of the stomach has come on, and the abdominal distension is now very great; she does not complain of pain, nor is the abdomen tender; cathartics, and subsequently enemata with opiates, failed

to overcome the obstruction, which was complete after the 14th, and she gradually sank and died on the 19th.

At the *post mortem* examination, the sigmoid flexure of the colon was found a solid mass of cancerous structure, the intestines above were distended with flatus and fluid feces, but presented no appearance of inflammation. The uterus and other organs were healthy in structure, and the cancerous deposit appeared to be confined to the colon and the subcutaneous cellular tissue of the abdomen and chest.

CASE II. Wm. Edwards, aged 58, admitted Feb. 23rd, 1886, under Dr. Malden. He is a farm labourer, and has enjoyed good health, with the exception of occasional attacks of pain in the loins, which he looked upon as rheumatic, till two months ago, when he began to suffer from severe pains in the abdomen, especially in the lower part; his stools were scanty and passed with difficulty, often mixed with blood: for this he went under the care of a surgeon, who told him he had inward piles, and gave him some medicine.

The abdomen is now enormously distended, very hard and tympanitic, painful, but not tender; the tympany is general, but if there is any difference, the left lateral region is less resonant than the others. He says that the bowels have not been moved since the 16th, and that on the 20th, 21st, and 22nd, he vomited frequently. The urine is abundant, and the circulation is not affected. The compound extract of colocynth with senna was given in full and repeated doses with enemata, which were administered by a long tube; this passed freely six or eight inches up the bowel, when it was stopped by some obstruction which did not yield to moderate pressure. The enemata were repeated several times to the extent of a pint or more, and some of them were very slightly coloured by faecal matter when returned.

Feb. 25th. As the purgative plan had produced no good effect, and the tongue had become dry, brown, and furred, with a rapid and feeble pulse, great anxiety of countenance and loss of sleep, with vomiting of the contents of the stomach, calomel gr. i, c. opii gr. ij, 4tis horis were substituted, and brandy with beef-tea administered every two hours, the enemata being continued.

Feb. 26th. Vomiting very trifling, as he can take but little food, and there is no nausea except from the presence of food in the stomach; the vomited matters, far from being stercoraceous, have not even been tinged with bile. He feels easier, and the countenance expresses less distress, but there is no action of the bowels, and the relief is evidently due to the opium. Pulse remains feeble, but is less frequent than yesterday.

Feb. 27th. The persevering use of enemata has hitherto been followed only by very slight staining of the fluid when returned, but this morning a small quantity of faecal matter was observed. It was evident, however, that he was fast sinking in spite of the liberal use of brandy, beef-tea, etc., and he died the same day.

Post mortem examination, Feb. 28th. Peritoneum healthy; stomach and intestines distended with flatus and fluid feces, but healthy in structure as far as to the junction of the sigmoid flexure of the colon with the rectum. There was a firm mass of cancerous deposit in the coats of the bowel, which had encroached on the cavity of the intestine, encircling it for about two fingers breadth; the stricture allowed the points of the fingers introduced at opposite ends to meet, and would not alone have completely obstructed the passage of the contents of his bowel, but on further examination there was observed a remarkable hypertrophy of the bodies of the last lumbar and first sacral vertebrae, extending chiefly to the left side, so as almost to form an exostosis, which, corresponding with the seat of disease in the bowel, by its pressure had doubtless completely stopped the passage. Less developed hypertrophy of the bodies of the vertebrae was observed in the lower part of the dorsal region, and was the only further morbid appearance noticed in the body.

REMARKS. In both these cases the gradually increasing

constipation and difficulty of passing stools pointed out the progressive development of a mechanical obstacle. In the first, there could be little doubt as to its nature, from the development of cancer in the external parts; and in the second, the acute abdominal pain, and the hæmorrhage from the bowel, would, in the absence of any hæmorrhoidal cause, lead to at least a strong suspicion of malignant growth. The absence of inflammatory complication was indicated, among other things, by the nature of the vomiting, neither urgent nor stercoraceous; the non-inflamed intestine bore the presence of its contents without being stimulated to inordinate action; and in the second case, the complete absence of vomiting for some days after the canal of the bowel was obstructed, pointed out the lower bowel as the seat of disease; the free secretion of urine confirmed this, and the obstruction to the passage of the enema tube six or eight inches from the anus, completed the diagnosis.

With regard to treatment, the relief of the obstruction by the formation of an artificial anus was in the first case quite inadmissible; and in the second, considering the loathsome result of the operation even if successful, the very probably malignant nature of the disease, and, above all, that the stoppage was not quite complete, it was thought better to rely upon the other remedies, than to have recourse to a dangerous operation, which could at best have only given temporary relief.

ESSEX AND COLCHESTER HOSPITAL.

CLINICAL OBSERVATIONS ON A CASE OF PARTIAL PARALYSIS, WHICH YIELDED RAPIDLY TO TREATMENT.

By P. MARTIN DUNCAN, M.B.Lond., etc., Physician to the Hospital.

JANUARY 5th, 1886. G. Glozier, a short, wrinkled man, aged 61 years, was admitted under my care, complaining of inability to grasp with his right hand, to move his right arm, and to walk steadily. He suffered from a dull pain in his head, had sleepless nights, and had lost flesh.

History. He had good health up to eighteen years ago, when he had syphilis very severely: he had sore throat, nodes on the shins, and a necrosis of part of the frontal bone. Two years since, he was treated for Pott's fracture by one of my colleagues. His recovery was complete, and, at the present date, no shortening is observable. Of late, starvation in a degree has weakened him: he has had plenty of bread, but meats and such like are strangers to him. About two months ago, he suffered from "pins and needles" in his right fingers; this symptom was speedily followed by a sensation of numbness in the fingers and arm, and loss of power soon supervened. He noticed, shortly afterwards, pain in the head; it commenced at night, prevented his sleeping, and affected his spirits. The right leg then began to lose power. He has taken little or no medicine, has had constipated bowels, but has not vomited. There is no history of rheumatic fever; he has no perspirations; and the man can remember no injury to his head or spine.

Present Condition. Is a short sturdy built man, has iron grey hair, no arcus senilis, but a very wrinkled face. He cannot see well with his right eye; but its pupil contracts equally with that of the left eye, and there is no cataract. There is no facial paralysis; his tongue is protruded properly, and with force; and his enunciation is distinct. There is a large scar over the frontal sinus, but no pain is produced on pressure. He complains of constant pain, aggravated at night, in the left side of his head, in front of the parietal eminence; but pressure does not affect the intensity, or cause the pain. He has never had a fit of any kind, and there is no giddiness; but his memory is not so good as it was a few months since, and he says that he is always thinking about very absurd and curious things. He