from the discharge. On examination, he found the os uteri slightly dilated; but there was no pain, and he rightly diagnosed the case to be one of the placental presentation. The state of the patient was reported to the husband, who wished assistance to be procured: I was therefore sent for.

On my arrival, I learnt that the patient had only a few days before returned from a watering place, where she had been to consult a physician about the health of her son. The opinion was very unfavourable, and this seemed to prey on her mind. She came home full of mental anxiety, and with her body distressed from fatigue. This condition of mind and body, and the loss of blood she had sustained, had placed her life in imminent peril, and had ill prepared her for what she had to undergo. After sundry little foolish obstacles had been got over about my seeing her, I was permitted to make an examination, the result of which was not very satisfactory, as there was no pain and no hæmorrhage. I was not justified in pushing the examination sufficiently far to enable me to form a perfectly accurate opinion of what was going on. The cervix uteri was flabby; there was no pressure on the os, nor was it much dilated; the index finger indicated a smooth unyielding surface, certainly not like a shreddy piece of placenta. As our object and aim was to secure the patient against the continuance or recurrence of the hæmorrhage, there being no syncope, I was satisfied there could be no internal discharge going on; and therefore thought it wise to discontinue my exploration, and wait till the patient rallied a little.

About midday, the nurse informed us that the patient had a pain, and she thought the discharge was returned. We directed her to bring us the napkins; their appearance clearly proved that the membranes were ruptured. My friend made an examination, and reported that the os uteri was rather more dilated, and that there was a slight discharge. We talked over the case, and agreed that the time was come for us to do something in order to save our patient. We thought that if we could excite the action of the uterus a little, we should be doing good; and that a dose of ergot would stimulate the expansive action of the uterus, and promote its contractile power after its contents had been withdrawn. But the surgery was four miles off. Having, however, servants and carriages and horses at our command, these appliances for annihilating time and space were set in motion, and the ergot was soon procured. A drachm was boiled, and the decoction given to the patient. In about half an hour afterwards, there was a slight action of the uterus, and we proceeded to deliver. It was arranged that I was to find the child, and my friend was to complete the delivery; nothing was to be left for the mother to do.

When I began the operation, I did not find the os uteri so much dilated as I expected. The neck of the uterus was very lax, and I had much difficulty in dilating it. The moment I came into contact with the placenta, the flooding came on. The whole mass of placenta was impacted in the cervix uteri, not adherent. The part of the placenta presenting at the os was near the insertion of the cord, and where the membranous lining is very firm and strong, and the vessels large and very vascular, it required great force to push through it. The moment my hand reached the cavity of the uterus, there was a most awful gush. It poured off the bed into the vessel in a frightful manner. Although I knew most of it was liquor amnii which had passed through the placental mass, it had a very sanguineous appearance. The quantity was great, and must have been a great shock to the patient's system; it shook the nerves of her attendants. I found the child lying across, one hand imbedded in the placental mass. I soon found one of the legs, and without searching for the other, pulled it down in order to put a stop to the discharge. My friend finished the delivery, while I firmly grasped the uterus through the walls of the abdomen; and we had the satisfaction of bringing into the world a fine living child, and having the mother doing as well as could be expected.

About ten days after the confinement, she complained of a pain in one of her legs, which ended in phlegmasia dolens. This was treated first with calomel and leeches, and subsequently with bandaging the limb, and now all is going on well.

REMARKS. The above case is one of accidental hæmorrhage; and I think the child was the innocent cause of the accident from the situation in which I found its hand. I have no doubt that it had been thrust through amnion and chorion into the placental mass when I found it. By this accident a small quantity of the liquor amnii escaped, which got mixed with the blood within the membranous lining of the placenta (in removing a placenta entire, we generally find a large quantity of fluid blood in it); this was the sanguineous fluid which was expelled by the first action of the uterus after the accident, and which, from its quantity, produced such a shock to the system of the patient as to cause syncope, and create much alarm to the family. The first effect of the reaction of the uterus was to propel the placenta already implanted in the cervix uteri to the os; and this put a stop to the flooding, and prevented any further mischief.

The attack of phlegmasia dolens that followed (or *crural phlebitis*), which I think is a much more expressive term, might have been expected after such a labour. Dr. F. H. Ramsbotham says: "Those who have suffered a lingering and painful labour, and particularly those in whom profuse uterine hæmorrhage has taken place before or after delivery, are by far most frequently the subjects of this affection." This patient had both these pre-disposing causes to a high degree.

Clinical Lectures:

DELIVERED IN

ST. BARTHOLOMEW'S HOSPITAL, LONDON.

BY

F. C. SKEY, Esq., F.R.C.S., Surgeon to the Hospital.

No. IV.

ON LITHOTRITY: THE USE OF CHLOROFORM IN THAT OPERATION.

I WISH to-day to say a few words about a case of lithotritry we have had in the hospital. The subject is one of some extent, but I do not propose to enter into it at any great length, as this is one of the last days of the summer session. When it is remembered that the deaths from lithotomy are certainly 25 per cent. on the whole number of cases, and something almost frightful in old patients, you will at once recognise the very grave necessity which exists for a proper appreciation of the relative dangers of the two operations, and the different details connected with both.

The operation of lithotritry is now as perfect as perhaps it is likely to be, chiefly through the labours of Heurteloup, and, in later years, of M. Civiale (recently in London). It is not as "showy" an operation for the great operator as lithotomy; but our duty to society should be our first thought—what is best for our patient; and our duty to the profession and ourselves will come in better after that.

I will mention a case, and on that hang a few observations as we go along. This case is the instance of a clergyman who was unfortunately afflicted with stone in his bladder. When I first saw him, my stonest lithotrite almost failed to crush the stone, it was so unusually large. I succeeded, however, in breaking it sixteen or seventeen times, and did not leave a trace of it. I broke it once. I broke it twice; but I was particularly struck with this fact, that one does not know the specific amount of irritability of the bladder in each case till manipulation with the lithotrite shall have been performed a few times. A stone gives pain, I think, in some not very indirect proportion to the size of the stone; and the capacity of the bladder to hold water is

again in proportion to the irritability of that viscus, partly caused by the size of the stone. Now this irritability of the bladder, from my own experience and observation, built up in a good measure also on that of Sir B. Brodie (for he is a great surgeon, from whom one may receive facts and opinions with the utmost reliableness), this irritability, I say, allows the bladder to hold from four to six ounces of water; but if the bladder will take twelve ounces, as some say it will, the case is a bad one; take care of it. Even four or five ounces very often rouses the irritability more than you would wish; but by gentleness and chloroform, if necessary, you need not fear this irritability. I have used chloroform in lithotripsy, I think, about half a-dozen times, but it is just as well not to use it if you like. No harm may come of using chloroform under ordinary precaution. Occasionally much good may occur, as chloroform reduces the irritability of the muscular coats of the bladder in all probability; so, as a rule, I would say, you may use it. You insure the patient, at any rate, remaining quiet; and this is something in a nervous patient, we will say, in private practice. You insure, I think, another very important point—the retention of the water in the bladder. But if it is objected, and objected, too, not without some very good reasons, that by using chloroform you are liable to catch the mucous membrane of the bladder. Well, I must say, I never caught the mucous membrane of the bladder where I was able to ensure four ounces of water in the bladder; that is the point. For if the water drains away, and there is a flaw somewhere in the proceedings, the mucous membrane is likely to be caught up; and if it be caught up, what then? Well, I'll tell you. There is great pain, and, of course, if the patient has had no chloroform he cries out, and you understand all about it.

Well, I'll tell you a story of this same squeezing and pain of the mucous membrane of the bladder; you must not be too much frightened about it. Of course, a man who has operated a few times under chloroform can distinguish the sharp click of the stone from the velvet leathery touch of anything else; but in one case which came under my notice, in consultation, the water oozed away, and a piece of mucous membrane was caught up, aye, the size of that watch. We were all naturally alarmed; but knowing the vast resources of Nature, I predicted that Nature would get over it; that there would be hæmorrhage, and nothing worse; and so it was. I believe this was before chloroform was thought of, but the case is instructive. No doubt new mucous membrane was formed by that singular sub-mucous cellular tissue under it; the bladder in these cases is thrown into bands and curtains of false tissue, and one of these probably had been nipped off, but the man had not a bad symptom.

Now, as to catching the stone; do not grope about as some do, first turning the lithotrite to one side, then to another, and then turning it up like a forceps. All this is entirely unnecessary. I will undertake to catch the stone eleven out of twelve times, or more certainly four out of five; this is not a difficult matter in the operation.

In the after treatment there is really very little to do. This patient took his ordinary food; if there is anything to do, it is to give the patient diluent drinks, plenty of barley water, mild lemonade, vegetable salts of the alkalies, etc. Do not reduce your patient's strength, but rather the opposite: feed him well, keep him quiet, place an opium suppository in the lower bowel after each sitting, and strive as much as possible to get rid of every fragment of the stone. This brings us to the question of the return of stone in the bladder after lithotripsy. I believe, however, as a rule, these return cases are new stones. Mr. Stanley showed us a piece of stone that came away as a fragment, as large as half an almond, or half the size of the last joint of my little finger. You will detect a new or entire stone of this size, or the size of a bean, in children, by fine sounding. Suppose a fragment of this size remains in one of your last "sittings" of a case, you ought to detect it; one sees the necessity of finer "sounding;" but as an objection to lithotripsy, as an operation, it is—*nil*.

Now, after all, if you ask me what instrument to sound with, I say with a lithotrite. Educate your sense of touch; do not use too many instruments. The mode I adopt is to make a sort of cone of the bladder, and let the stone drop into this cone.* Do not grope about; shake your patient's pelvis, if you wish, by a slight shock of the end of one hand against his hip. A young surgeon, Fernandez—not Sir B. Brodie, as some say—first suggested this. Do everything with the utmost gentleness; do everything in order, and with a little of that erudite appreciation of the sensitive parts in which the lithotrite is at work, and you are certain to succeed, to the great delight of your patient, who is saved a cutting operation of very serious gravity indeed.

Reviews and Notices.

ON THE DEFECTS WITH REFERENCE TO THE PLAN OF CONSTRUCTION AND VENTILATION OF MOST OF OUR HOSPITALS FOR THE RECEPTION OF THE SICK AND WOUNDED. By JOHN ROBERTON, Surgeon. (Reprinted from the *Transactions of the Manchester Statistical Society*.) Pamphlet, pp. 16. 1856.

THIS useful little essay commences with an allusion to the incredible ignorance which popularly prevails in regard to the necessity for free circulation of air in rooms where men or animals are compelled to breathe. The author then makes a few remarks on the ventilation of workhouses and gaols where persons in health are confined, and he then goes on to consider the distinction between wards for the sick and wounded and dormitories for the healthy. In the latter, ample air-space is all that is required; whereas in the former, where the inmates pass the entire twenty-four hours, and are afflicted with inward disease, or open suppurating sores, something more is demanded. There must be a provision for an abundant and continual through-current of air, not merely to supply the wants of respiration, but to carry off the effluvia that arise from the bodies of the sick, and from the discharges of extensive and ill-conditioned wounds and ulcers.

Nearly all our English hospitals become, after a time, infected with a *hospital atmosphere*, which arises from the wards communicating with each other by passages and stairs, so that when one ward becomes foul the whole house speedily participates in the contagion. On the continent, however, there is a method followed whereby the production of a hospital atmosphere is entirely prevented, and by which also the most complete ventilation of each ward is obtained.

The plan which Mr. ROBERTON would place in contrast with the construction of English hospitals is to be found in the grand hospital of Bordeaux, built in 1825; in the St. John's Hospital, in Brussels; and in the Lariboisière and Beaujon Hospitals, in Paris, built within the last few years. By the aid of a ground plan, which accompanies the pamphlet, the construction is easily explained. A description of the Bordeaux hospital is given by the author.

On the two sides of a spacious court-yard, in the form of an elongated quadrangle, are five separate piles or pavilions ranged at right angles to the length of the quadrangle, with ends abutting upon it, and running parallel to each other. Little gardens separate the pavilions from one another, and running along their ends, and connecting the gables of the pavilions, is a light arcade, or ambulatory, from which the basement story is entered by a single door. A single ward is thus entered, which occupies the entire

* M. Civiale, who has been recently in London, observes a rule a little different from that of Fernandez. He proceeds in the same manner as Mr. Skey. He introduces the lithotrite as far as the triangular ligament with one movement, and then beyond it by a second, the patient all this time lying on his back on a table. He then inclines the patient to one side, when the stone almost invariably falls into the grasp of the instrument. M. Civiale seems to us to use a much stronger screw, or what is the same thing, a larger handle or wheel to his instrument; and having caught the fragments he reduces them to powder most completely. K.