

culty, indeed an insurmountable one on the hypothesis of aortic disease, of insufficiency, would consist in accounting for the closure-sound of the semilunar valves in the vessels of the left side of the neck; unless we were to hazard the very speculative conjecture that, from the displacement of the heart, the great vessels might be so compressed as to allow the sound of the pulmonic sigmoids to be conducted so far. Are the murmurs mitral—that is, obstructive and regurgitant? There is an entire absence of the general symptoms of such affection: the impulse-beat of the heart, though forcible, is steady; and the pulse is entirely free from that instability so characteristic of such disease. Can a double lesion coexist, and the conjoined signs modify each other? It is the existence of doubts and difficulties incident to cases like this that must plead my excuse for digressing somewhat from the main subject-matter of my paper to discuss, as briefly as possible, some points connected with the pathology of cardiac murmurs and sounds. It has generally been maintained that comparatively loud murmurs, systolic or diastolic, heard at the apex of the heart, belonged almost exclusively to the affections of the mitral orifice; but I believe that the apex may be at times a common focus of aortic and mitral murmurs. Marey has experimentally demonstrated, what had long been clinically known, that a systolic murmur of intensity may be heard at the apex in constrictive disease of the aortic mouth, propagated by the back current; and I would furthermore add, from personal experience, that when insufficiency occurs in young persons where the aorta is still resilient, a strong diastolic murmur may be heard at and below the apex—indeed, I believe that often the stronger the diastolic murmur in this situation, the greater the reason to suspect aortic insufficiency. That a diastolic murmur occasionally attends constrictive disease of the mitral orifice is well known, and at times with an amount of intensity and thrill which is difficult to explain, remembering that it occurs during a period of cardiac repose, and, consequently, during the passive flow of the blood-current. It appears to be conditioned upon the amount and tension of the blood in the auricle, the tonicity of its walls, and the shape and condition of the obstructing outlet. So that murmur—*qua* murmur—at the apex cannot enable us to achieve precise diagnosis; for, as mitral diastolic murmur may be here strong or weak, so may aortic regurgitant murmur be strong or weak likewise. To effect the desired precision, we must auscult the aorta; observe the amount of collapse of the superficial arteries; seek, when practicable, the intermittent murmur of Duroziez in the femoral artery; study the tracing, and note the regular though special pulse in uncomplicated cases; and also mark the usually unimpaired state of the general health. For in aortic as in moderate mitral insufficiency, if the compensation is simply physiological, and the patient able to observe proper hygienic rules, an average state of health may be maintained for years.

(To be concluded.)

ON AN IMPROVED ELASTIC PESSARY.

By JOHN CLAY,

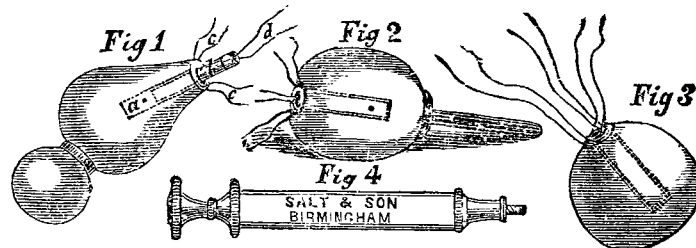
PROFESSOR OF MIDWIFERY, QUEEN'S COLLEGE, BIRMINGHAM.

WHEN an elastic pessary is introduced into the vagina and remains *in situ* for some time, the tube attached to the pessary for the purpose of inflating it often becomes so annoying to the patient that a prolonged use of the instrument cannot be tolerated.

To remove this difficulty, I have succeeded in devising an instrument which can be adapted to any form of elastic pessary for the purpose of inflating it, and for removing the air when it is desired to withdraw the pessary from the vagina. The annexed woodcut shows the instrument fitted to the ordinary globular and intra-uterine pessaries, and to the double pessary, for flexions of the uterus described in THE LANCET of Sept. 25th, 1869, p. 434.

* Marey asserts that they can and do; and that the pulse of simple insufficiency is far more irregular than that of contraction. I venture to doubt the correctness of the latter assertion.

The principal feature of the instrument is a new form of valve shown in detail (Fig. 1). Its mechanism consists of a double tube (*a, b*), forming a cylinder and piston. The pessary is introduced into the vagina in its flaccid form, and is then inflated by the force-pump (Fig. 4), which is connected with the valve by screwing at the part *b* (Fig. 1).



The piston-rod (*b*) is then pushed in flush, and the force-pump unscrewed. When the pessary is required to be removed, it is held firmly by two catgut strings of convenient length (*cc*), at the same time that the piston is drawn forward by the string (*d*). The air will then escape, and the pessary collapse, when it may readily be withdrawn from the vagina.

The working-out of the suggestion seemed at one time to be a mechanical impossibility; but, owing to the skill and attention of Messrs. Salt and Son, of this town, an instrument has been perfected as simple in its construction as it is efficient in its application.

I purpose on a future occasion to give fuller details of the application of these pessaries to different forms of uterine ailments.

Birmingham, Dec. 1869.

A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A CASE OF EMPYEMA TREATED BY PARACENTESIS, AND
SUBSEQUENTLY BY BLISTERING; CURE.

(Under the care of Dr. ANDREW CLARK.)

THE success which attended the treatment renders the following case well worthy of record. We are indebted to Mr. Grubb, the resident medical officer, for notes.

The patient was a weakly boy eight years of age, who, six months before admission, had had an attack of scarlatina, which was followed by dropsy lasting for six weeks. One week before admission the boy again suffered from dropsy. When first seen by Dr. Clark he presented the following symptoms: Anasarca; great dyspnoea; a short, dry cough, without expectoration; a flushed face; and an inability to lie on the left side. The heart was displaced to the left; no cardiac bruits. The lung-sounds on the right side were very feeble, and all the signs were present of considerable effusion into the corresponding pleura. The urine was very scanty, smoky, and contained much albumen; specific gravity 1015. The pulse was 106, and the respirations 36 in the minute; temperature about 102°. There was a slight amount of ascites.

The patient was first treated by tincture of the perchloride of iron, spirit of nitric ether, digitalis, and bitartrate of potash; and for a time was put on a daily allowance of three ounces of gin. The breathing at first was relieved by this treatment, and an increased quantity of urine was passed; but at the end of the first week after the patient's admission into the hospital there was great dyspnoea and restlessness. On the

tenth day the right side of the chest was tapped, and forty ounces of purulent fluid withdrawn from the pleura. After this operation the breathing was much quieter, and the general condition of the patient improved. About the middle of June, two weeks after the paracentesis, the old symptoms returned, with all the physical signs of fresh accumulation of fluid on the right side of the chest. On July 1st a blister three inches square was applied over the seat of dulness. Under the repetition of this local treatment, and the administration of digitalis, bicarbonate of potash, iodine, and steel, and subsequently of cod-liver oil, the patient gradually improved; the effusion disappeared, and the respiratory sounds returned on the right side of the chest. On December 2nd the boy was discharged as cured.

UNIVERSITY COLLEGE HOSPITAL.

OPERATIONS BY MR. MARSHALL.

Syphilitic Stricture of the Rectum.—On Thursday, the 23rd of December, Mr. Marshall operated on a middle-aged woman for a tight stricture of the rectum very near to the anal orifice. There was a clear history of general infection, which had taken place some years before. Mr. Marshall stated, in some remarks made before the operation, that syphilitic ulceration frequently extends backwards from the genitals to the margins of the anus, and, in some instances, passes into the rectum. Syphilitic disease within the rectum manifests itself in the form of a round ulcer at the posterior surface of the bowel. This round ulcer often spreads laterally, and occasionally to such an extent as to form a narrow annular band of ulceration around the whole of the rectum, near its lower end. The condition of parts which results from the cauterisation of an ulcer of this last kind was well exemplified in the present case. The finger, when introduced into the bowel, came first upon a thin and fibrous constriction, above which was a narrow and annular groove, and then another tight constriction, thin and fibrous like the first. Mr. Marshall made several minute incisions into the edges of the strictured portions, and then dilated the narrow portion of the rectum by the finger, the expanding blades of a large pair of dressing forceps, and, finally, by the introduction of a fair-sized rectum bougie. Very little hæmorrhage was produced through this operation. Whilst this patient was on the table, Mr. Marshall removed from her right breast a tumour of the size of a small apple. This growth was hard, freely movable, and not infiltrated in the tissues of the breast, and connected with the outer margin of the breast by means of a tough and narrow pedicle. The absence of pain and other symptoms indicated pretty clearly a glandular tumour of the breast; but, after removal, its cut surface resembled very much that of a scirrhus and malignant tumour. Mr. Marshall proposed to submit a section of the growth to microscopical examination, as this was the unfailing test of the true nature of doubtful tumours.

Operative Treatment of Varicose Veins.—On the same day Mr. Marshall operated in the following manner on varicose veins of the right leg in a young woman. A bandage was first applied round the limb just above the knee-joint, in order to produce distension of the affected veins. Under the thickest masses of varix were passed large broad needles, resembling very much those formerly used for inserting setons. The sharp extremity of each of these needles was then detached; over the vein at the seats of puncture were placed small pieces of a thick gum-elastic tube, and the inner surfaces of the vein at these points were kept in contact between the broad needle below and the elastic tube above by means of a ligature applied in the figure-of-8 form. Small branches of the distended and varicose veins were then treated by the ordinary thin pin and suture. Mr. Marshall stated that it was his practice to remove the pins at the end of forty-eight hours, or at the end of the third day at the longest, leaving the pieces of elastic tube and the ligature *in situ*; and to apply a bandage to the limb. The cases treated in this manner have generally had a very good termination, the veins becoming ob-

structed by adhesive inflammation, and, in most instances, without the appearance of even a few drops of pus.

MIDDLESEX HOSPITAL.

MISCELLANEOUS CASES.

(Under the care of Dr. MURCHISON.)

Tapping of the Chest in Acute Pleurisy.—The patient in this case was a boy, aged seven years, whose chest was tapped on the twelfth day of an attack of acute pleurisy of the left side. There was a large effusion of serous fluid, which had forced the heart over to the right side, where its apex could be made out between the fourth and fifth ribs. The indications for the operation were a frequent, feeble, and irregular pulse, and great dyspnoea. Dr. Murchison stated that in cases of extensive pleuritic effusion, tapping is performed for several reasons. By an early removal of the serous fluid, the formation of pus in the chest and empyema may be prevented; the lung also has a better chance of recovering itself and of expanding if the surrounding fluid be removed before the solid exudation has formed firm adhesions. The main object of the operation, however, is the restoration of the position of the heart, as there is far greater danger in cases of pleuritic effusion, especially when the left side of the chest is affected, of the patient dying from sudden syncope than from asphyxia. The boy did very well after the operation; the left lung speedily expanded, and healthy sounds could be heard over nearly the whole of the chest. There was no tendency to a reaccumulation of fluid; and on December 19th the dulness, on percussion, was limited to an extent of two inches over the base of the left lung. The progress of this case to complete recovery has, however, been retarded by the manifestation of two unfavourable symptoms—a high evening temperature, reaching to 102.6° F., and occasionally to 103° F., and frequent profuse sweating. These symptoms, according to Dr. Murchison, may be attributed to one of two causes: either the fluid left in the chest has become purulent, or there may be a deposition of tubercle in the lung. The latter view, however, seems to be negatived by the healthy character of the lung-sounds over the left as well as the right side of the chest.

On Cardiac complications of Renal Disease.—The two following cases were recently under treatment at this hospital. A boy, eight years of age, after a very slight attack of scarlet fever, was admitted with general dropsy and albuminuria; and a middle-aged woman with long-standing fatty degeneration of the kidneys, and a recent attack of acute nephritis. In both these patients manifest symptoms of aortic valvular disease were presented. Dr. Murchison directed especial attention to the cardiac affection in these cases, for the purpose of showing that in valvular disease following morbid changes in the kidneys, the first lesion in all cases, and very frequently the only one, affects the aortic semilunar valves; whilst with acute rheumatism, on the other hand, the mitral valve is always the first to become implicated.

ST. THOMAS'S HOSPITAL.

CASES OF FRACTURE.

(Under the care of Messrs. SOLLY, LE GROS CLARK, and SIMON.)

DURING the past few months some interesting cases of fracture and dislocation have been treated in this hospital. Some presented unusual symptoms; in others some departure from the ordinary mode of treatment was rendered necessary. Mr. Churchill, the surgical registrar, has been good enough to give us a report of them, the first portion of which we publish herewith, reserving the remainder for future occasions. The order adopted is that followed in the standard nomenclature.

CASE 1. *Compound depressed fracture of skull, without head symptoms.*—J. M—, aged eight, was struck on the right