meanwhile either by a pair of forceps, or transfixed by a curved needle. The latter is perhaps preferable, as, besides everting both edges of the fistula, it has the advantage of having a needle inserted ready to be armed in the second stage. This consists

in passing needles, made on the same principle as Startin's; but instead of being of flexible material, they are made of rigid steel, and with various curves—fourteen in all. (Fig. 4 represents Nos. 1 and 14.) The needle is passed within a quarter of

FIG. 4.

an inch external to the denuded surface, and thrust through the coats of the vagina and the muscular tunic of the bladder, avoiding its mucous lining, and out again on the opposite side at the same distance from the fistula. (Fig. 5, A.) The wire having been previously passed, the needle is drawn out, the wire being held in (B) by forceps to be fastened. This is extremely simple. I have used shots and buttons, and have invented clamps, &c., (all of which are described in the book already mentioned,) but I have come to the conclusion that nothing is so easy or effectual as simply to twist the wire round

and round with the fingers, or, if too far to reach thus, by Weiss' self-holding forceps (Figs. 6 and 7). The ends of the wire are cut off (Fig. 5, c), and the operation is completed. No dressing is required. The patient is placed in bed on her side, with her knees drawn up. A male elastic catheter, without the stilette and with bag attached, is introduced, and the patient left quiet for ten or fourteen days; when, to take out the wires, one has only to cut them on one side of the twist, and draw them out with forceps in the ordinary manner.

(To be concluded.)

FIG. 5.

FIG. 6.

FIG. 7.

ON SOME DISCORDANCES IN THE ARTERIES AND HEART.

By WILLIAM BAKER, M.A., M.D., Howden.

PATHOLOGY has certainly done much to aid us in the investigation of disease, and to lead us to a correct diagnosis. Still the physician is frequently very seriously perplexed. In organs the most essential to life, it is on many occasions no easy matter to determine whether the morbid phenomena we witness are the result of disordered functions, or are dependent upon some serious organic lesion; and it requires no trifling degree of intelligence and tact to enable us to come to correct or satisfactory conclusions respecting them. In inordinate and paroxysmal affections of the heart, for instance, the pulse, on many occasions almost a sure index to the various pathological conditions

of the heart, will occasionally completely fail us—the strict accordance betwixt them no longer exists. The pulse at the wrist may be feeble and irregular, when the heart is acting with both force and regularity. Neither do the radials on all occasions propagate every beat of the heart; in some rare instances the pulsations of the wrist are only half those of the heart, and this at a time when the carotids are found in the strictest accordance with the heart both in force and frequency. With this discordance of physical signs we occasionally find likewise a great variety of symptoms. It is so, because the sufferings we witness may be produced by various sympathies, or they may be caused by some serious organic lesion of the heart itself. In support of some of the above facts or positions I beg leave to report the following case:—

Mrs. P—, a lady aged fifty-four, of healthy appearance, was seized during the night of Thursday with many uncomfortable feelings, oppression and palpitation of the heart. The palpitation continued and gradually increased in violence till Sunday, the day of my first visit. She said she had suffered

occasionally from palpitations for twenty years, but that all former attacks were as nothing to the present one. The heart was certainly acting on this occasion most riotously. She said it had got to the wrong side, but, in fact, that she felt it in every part of her. The respirations were 34 to 40. Pulse at right wrist not detectable; left, 100 and feeble. The impulse of the heart was great, beating 200 in a minute; and the carotids accorded with the heart both in force and frequency. During Sunday, Monday, and Tuesday there was little change. The heart and carotids during those days were beating 200, 180, and 160; the right radial was still extinct, and the left only propagating every other beat of the heart. On Wednesday the heart and carotids, always in accordance, descended to 100; the right radial had resumed its beat, and, along with the left, was found to accord numerically with the heart and carotids. The improvement was then rapid, and the patient was soon restored to good health.

In spite of the extreme symptoms and suffering in this case, I was inclined to believe it was one of great functional disturbance, most probably produced by reflex action of the ganglionic nerves, and the stomach the offending organ. The respirations were certainly very greatly quickened, but not particularly embarrassed. Elevation of position was not required, yet the call for fresh air was rather urgent. On the morning of Sunday, previous to my visit, on becoming erect she experienced some vertigo, which was immediately relieved by returning to bed. Both signs and symptoms, I think, warranted the opinion I had formed; and knowing the good it might effect, I did not hesitate to make it known.

Hypothesis is the basis of practice, and theory the vehicle by which it is explained, but on this occasion it is not necessary that I should enter into the minutiae of treatment. The paroxysm was one of great severity and duration—nearly six days,—but the path of the physician seemed sufficiently clear. Depletory, revulsive, and calmative means were clearly indicated by the symptoms, and sanctioned by the capabilities of the patient. A few leeches and a cupping glass near the heart were attended with some immediate comfort and lasting good.

It may be asked—To what are we to attribute the great discordance in the radials and heart? I think it highly probable that when the heart beats 200 in a minute, its systolic action may not be so complete as to enable it to propel, on every contraction, a sufficiency of blood to produce pulsations in remote arteries like those of the wrist, whilst more contiguous ones, as the carotids, may be influenced by every beat of the heart. Respecting the discordance in the radials themselves various opinions may be offered. There was no diminution of power or temperature in the right arm; and, in the absence of all detectable pulse at the wrist, it may be supposed that the circulation in the part was continued for several days solely by the efforts of the heart. That arteries do possess independent powers is revealed by their occasional local and abnormal conditions. They undoubtedly suffer from spasm; and I have lately treated a local affection in an artery which had produced much alarm by its unnatural and riotous impulse; it seemed to act convulsively, and was cured chiefly by chloroform and pressure. Dr. Elliotson named to me a case where the cessation of the pulse in both wrists appeared in an intermittent form, accompanied with blanched skin and great coldness in both arms, and was cured by the administration of quinine.

Howden, Nov. 1861.

ILLUSIONS PECULIAR TO PATIENTS WHO HAVE UNDERGONE AMPUTATION OF LIMBS.—M. Rizet, surgeon-major to the 32nd Regiment of the Line, in France, mentions, in the *Gazette Médicale de Paris* of the 2nd inst., several cases illustrating certain sensations experienced in stumps, in confirmation of similar cases published in the same journal on the 5th ult., by M. Gueniot. M. Rizet's four cases refer to amputations at the shoulder-joint, of the arm, of a portion of the foot, and of the leg. In all these cases the patients mentioned sensations as if the fingers or toes, as the case might be, were retracted in the wound or stump, so much so that one of the patients insisted on the dressings being taken off, complaining that some foreign body had been left in the soft parts. Another peculiarity, experienced by some persons who have lost a limb, is the fear of knocking the absent limb against door-posts or pieces of furniture, when going by. M. Rizet asks the question whether these illusions, which were common enough before chloroform was used, are now as frequently met with. A point of practice worth notice is the fact that sensations of the kind described were always experienced in the cases which made a good recovery.

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

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

KING'S COLLEGE HOSPITAL.

LARGE RECURRENT FIBROID TUMOUR, SITUATED ABOVE
THE LEFT BREAST; SUCCESSFUL REMOVAL.

(Under the care of Mr. FERGUSSON.)

THE persistence of recurrence is well shown in the following case, the notes of which were taken by Mr. H. Marsdin, the dresser of the patient. After each removal the nature of the growth appeared to become more and more malignant, a usual character of the recurrent fibroid disease. For the last six months pain was a prominent symptom, and the tumour ulcerated and discharged some blood. Through bad advice she consulted a homœopathic practitioner, who promised to cure her; but the tumour grew larger and larger, and at last she was compelled to come to the hospital for relief. An operation was advised, with the risk of a large wound; yet if neglected the certainty of a fatal result was quite apparent. "Here was an instance," as Mr. Fergusson remarked, "in which the patient might be said to be half dead from the disease, and yet, if the operation should prove successful, she might have some years of comfort. This tumour should not have been allowed to attain to such a size, as the operation would then have been one of less magnitude." During its performance there was seemingly at first a great flow of blood; it, however, turned out to be chiefly serous. Instead of dissecting out the tumour in the present instance, Mr. Fergusson enucleated it to some extent with his fingers, thus avoiding much bleeding. It ran close to the clavicle at its inner end, over the sterno-clavicular insertion, a spot where he thought it was the most likely to return. The mammary gland below the tumour was uninvolved.

Elizabeth E—, aged forty, widow, admitted on the 16th of August, 1861. Has resided in London thirteen years. Fifteen years ago she perceived a reddish, painless tumour, as large as a marble, immediately below the left clavicle. At the end of ten months it had increased to the size of a walnut, and was then excised. At the expiration of five months it reappeared in the same spot, and at the end of twelve months it was as large as a breakfast-cup. It was now excised for the second time. Twelve months after the last removal it reappeared in the old cicatrix, and after remaining there for three years, by which time it had attained the same dimensions as on the last occasion, it was removed for the third time. After the last operation the disease remained in abeyance for five years and a half, when it again appeared; and from this time (eighteen months ago) it has continued to increase in size. For the first year it was painless, and her general health was not affected by it; but six months since that began to fail, and she commenced to suffer from a throbbing pain in the tumour. A month ago it broke in two places, and discharged a little blood.

Aug. 16th.—The tumour occupies the left subclavian region, above the left mamma; it measures 27 inches in circumference, 15½ from side to side, and 13½ from above downwards; its surface is traversed by prominent and tortuous veins, and the integument covering it is of a deep red, interspersed with patches of purple. The patient wears an anxious expression of countenance, and her skin is sallow, but she is not emaciated.

17th.—The patient being placed under the influence of chloroform, Mr. Fergusson made two incisions from the axillary to the sternal margin of the tumour, enclosing an elliptical portion of skin on which the two sores were situated. The skin was now withdrawn from over the tumour, and the latter shelled out, any very adherent portions of connecting tissue being divided by a touch with the scalpel. A few of the larger vessels were next tied. The operator then proceeded to remove