

return impossible without enlargement of the wound, Dr. Henderson resolved on cutting it off, and

"To prevent hæmorrhage, a ligature was applied tightly round the base of the protrusion, which was then cut off. Two arterial twigs bled very freely, and it was found necessary to take them up, and a double ligature was also passed through the stump, and tied on either side, when all bleeding ceased. No attempt was made to return the portion of liver which still filled up the wound, as it was desirable to prevent all risk of blood or bile being extravasated into the cavity of the abdomen. For a day or two the patient was rather low, and had slight irritative fever, and the bowels remained costive. These symptoms yielded to a few doses of purgative medicine, and in nine days the ligatures came away along with a small slough of liver; the wound granulated and healed, and the man returned to his home in three weeks. No bilious discharge occurred from the granulating surface of liver. The portion removed, after having lost its blood, and being in spirits for some weeks, weighed 14 oz., its surface uneven, though not torn, and it is probably a portion of the edge of the right lobe, from near the notch between it and the left."

"It might be added, that the patient complained of a good deal of pain when the surface of the liver was touched, but that cutting through its substance, caused him hardly any."

"The old man appeared two months after as prosecutor in his own case; he was in perfect health. There was a little puckering in of the skin about the wound, and the liver was evidently adherent beneath."

## MIDWIFERY.

### EXTIRPATION OF THE UTERUS SUCCESSFULLY PERFORMED.

By T. L. GREGSON, Esq., Surgeon, Newcastle-on-Tyne.

Mrs. A.—had been delivered of her second child, by a surgeon, in a village, two years ago. As she complained of much pain and uneasiness, on the third day, her medical attendant ordered her to get out of bed, and walk smartly across the floor. She improved slowly, and complained much. About a year ago, she came here, and was some months under the care of a surgeon. About six months ago I was called to attend her. I found her extremely emaciated and exsanguine, having for above a year been exhausted by most profuse hæmorrhage at every monthly period. On examination I found a pear-shaped body filling the vagina, the os tincæ embracing it firmly, and apparently adhering at one side. I gradually introduced my fingers, endeavouring to grasp it, and push it through the os tincæ. This procedure caused extreme pain and some hæmorrhage without its yielding in the least: it was of a purplish red colour. Feeling satisfied that it was an almost complete inversion, or, I might say, eversion, of the uterus, I endeavoured, by chalybeates, &c., ergot, and astringents, to improve the system; but every monthly period produced extreme exhaustion, and death seemed inevitable. As a last chance, and with the consent of herself and friends, I resolved to extirpate the uterus. I went, accompanied by my friend, Mr. Frost, a most able accoucheur, and who agreed with me, as she was so exhausted and exsanguine, that the attempt was justifiable. I laid hold of the tumour, and drew it as far down as possible; in so doing, the os tincæ entirely disappeared, leaving no doubt of the nature of the case. A very strong silk cord was then passed around it, and carried high up by the double canula, the cord being also passed through the eye of a strong curved steel staff.

I found this a very valuable means, as I could carry the ligature around the part with the greatest facility. The knot was then tied with great firmness, leaving the staff included in the ligature and opposite the knot; this instrument was secured to the inside of the thigh with a tape. By turning the handle once or twice round, the ligature could be tightened to any degree. This was done from day to day, and caused rapid sloughing of the part. It separated entirely on the ninth day. From the commencement of the operation to its coming away, reaction was very moderate. She required no treatment beyond an occasional anodyne, castor oil, and the catheter used twice. She gained strength rapidly. She was made to keep the recumbent posture twenty days. It is now three months since the operation. She goes about the house, and has walked out a little, feeling easy and comfortable.

Such cases being generally considered hopeless, I have detailed

particulars, perhaps minutely. I believe the great point to be kept in view when the ligature is used, is to tie it with great firmness at once.

On examining the part, I find that the body and neck of the uterus are entirely removed. There has been no disturbance at the monthly periods, nor symptoms of the system feeling the want of the organ removed.—*Lancet*.

## CHEMISTRY, MATERIA MEDICA AND PHARMACY.

### ON NEW MAGNETIC ACTIONS, AND ON THE MAGNETIC CONDITION OF ALL MATTER;

By MICHAEL FARADAY, Esq., D. C. L., F. R. S., &c.

"Experimental Researches in Electricity," 20th series, sect. 26th. (Phil. Mag., Feb. 1846, xxviii, 147).—The following is the order in which the several divisions of the subject treated of in this section of the author's researches in electricity, succeed one another:—1. Apparatus required. 2. Action of magnets on heavy glass. 3. Action of magnets on other substances acting magnetically on light. 4. Action of magnets on the metals generally. 5. Action of magnets on the magnetic metals and their compounds. 6. Action of magnets on air and gases. 7. General considerations.

In giving an account of the contents of this paper, any attempt to follow the track of the author in the precise order in which he relates the consecutive steps of his progress in this new path of discovery, would fail of accomplishing its object: for, by adhering to such a course, it would scarcely be possible to comprise within the requisite limits of an abstract, the substance of a memoir extending, as the present one does, to so great a length, and of which so large a portion is occupied with minute and circumstantial details of experiments; or to succeed in conveying any clear and distinct idea of the extraordinary law of nature brought to light by the author, and of the important conclusions which he has deduced.

One of the simplest forms of experiment in which the operation of this newly discovered law of magnetic action is manifested, is the following:—A bar of glass, composed of silicated borate of lead, two inches in length and half an inch in width and in thickness, is suspended at its centre by a long thread, formed of several fibres of silk cocoon, so as to turn freely, by the slightest force, in a horizontal plane, and is secured from the agitation of currents of air by being enclosed in a glass jar. The two poles of a powerful electro-magnet are placed one on each side of the glass bar, so that the centre of the bar shall be in the line connecting the poles, which is the line of magnetic force. If, previous to the establishment of the magnetic action, the position of the bar be such that its axis is inclined at half a right angle to that line, then, on completing the circuit of the battery so as to bring the magnetic power into operation, the bar will turn so as to take a position at right angles to the same line; and, if disturbed, will return to that position. A bar of bismuth, substituted for the glass bar, exhibits the same phenomenon, but in a still more marked manner. It is well known that a bar of iron, placed in the same circumstances, takes a position coincident with the direction of the magnetic forces; and therefore at right angles with the position taken by the bar of bismuth subjected to the same influence. These two directions are termed by the author *axial* and *equatorial*; the former being that taken by the iron, the latter that taken by the bismuth.

Thus it appears that different bodies are acted upon by the magnetic forces in two different and opposite modes; and they may accordingly be arranged in two classes: the one, of which iron is the type, constituting those usually denominated *magnetics*; the other, of which bismuth may be taken as the type, obeying a contrary law, and therefore coming under the generic appellation of *diamagnetics*. The author has examined a vast variety of substances, both simple and compound, and in a solid, liquid, or gaseous form, with a view to ascertain their respective places and relative order with re-