the fact of his having sliced off disks of the kidneys, pancreas, liver, brain and spleen, and placed pieces of moistened paper between disks of different structure; and that beyond all doubt, so far as the majority of his experiments went, the spleen appeared to be capable of creating a more active electric current than a similar bulk of brain, liver, or other animal substance. With respect to the kidneys, they had, as the president had remarked, to deal with a material totally different from the spleen. The kidney was a hard, glandular body, the texture of which was exceedingly unlike that of the spleen, and its power of conveying the electric influence must also be widely different, owing to the presence of extraneous salts within the organ.

Dr. Geoghegan said, that although the details of Sir. James Murray's experiments had not come before them, yet they were entitled, from analogy and from the observations of other physiologists, to conclude that the electric fluid did circulate through the body. It had already been positively determined that electrical currents circulated between the stomach and the liver, the former representing the positive, and the latter the negative poles; and similar currents circulated between the interior and the exterior of muscles. There was therefore no ground for supposing that currents of electricity, such as James Murray had spoken of, did not circulate between the spleen and stomach, but he felt bound at the same time to say that Sir James Murray had not brought forward sufficient evidence to satisfy the Society as to the correctness of his inferences.

Sir J. Murray stated that the details of his experiments were so copious and so dry that the patience of the Society would be quite worn out before he had read them half through. They were, however, experiments of such a simple kind that any person who pleased could readily perform them for himself. Three manuscript volumes of these details had been formerly laid on the Society's table.*

TWO CASES OF STRANGULATED HERNIA, HAVING THE STRICTURE IN THE NECK OF THE SAC.

BY T. WOOD, M.D., OF CINCINNATI, OHIO.

In the January number of the Edinburgh "Monthly Journal of Medical Science," a case of strangulated hernia is reported, in which the stricture is in the neck of the sac and reducible with the tumor. I have met with two such cases in the course of my practice.

* The galvanic circle requires three substances—two excitors of electricity, and one conductor connecting them; the excitors may be two dissimilar animal substances, such as nerve and muscle, muscle and skin, and so on; the conductor may likewise be a third animal substance, or may be of the same nature as one of the excitors. Thus, then, the white corpuscular substance in the spleen, and the red erectile material of that organ, when united by the moist membranous links of processes, which complete the circle, like chains, possess all the requisite qualities of true galvanic circles, interlace by conducting fibres or threads, ramifying from one globular body to another, through the whole structure of the spleen, and capable of impressing marked galvanic changes on the torrents of blood passing through that organ. Alternate sections of recent cortical and medullary disks of brain, with membranes of dura mater interposed, also affect the galvanometer, but more feebly.

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CASE I.—In the winter of 1843, I was summoned to see James Hanna, of Harrison county, Ohio, in consultation with Drs. Kenedy and Hammond. On examination, I found in the right inguinal canal, a hard tumor, about the size of a hen's egg, which could by pressure be moved upward, so as to nearly disappear, flattering us with the hope that it was reduced; but on removing the pressure a few minutes, it would return to its old position. Symptoms of strangulation had existed forty-eight hours, and nearly every remedy had been tried before my arrival, except the operation. Stercoraceous matter had been vomited freely, and anything swallowed would excite emesis. I proposed a speedy operation as the only hope. To this Dr. Kenedy objected, by stating that he had known three members of Mr. Hanna's family to die from strangulated hernia, similar to the present case—that they had all been operated on by skillful surgeons, and the bowel returned into the abdomen without any cessation of the symptoms of strangulation, and that they had tried the most active means in their reach to procure a passage through the bowels after the operation, but in neither case could it be done. The patient himself thought his case a hopeless one, as he had seen the fatal results of the operations on his father, brother and sister; yet he was willing to submit to the operation if we thought it would give him any chance for his life. Dr. K.'s objections went no farther than that he considered it useless, and would give unnecessary pain; and these he urged no further—so the operation was decided on. I made an incision in the usual form, and opened the sac. On introducing the finger, I was somewhat puzzled to find so slight a resistance at the internal ring; but I made a gentle enlargement of it, with the bistoury, and returned, without difficulty, the tumor in mass into the abdomen, feeling at the same time a conviction that the bowel was not relieved from stricture. I then requested Drs. K. and H. to examine the wound, and see if they considered that the bowel was properly reduced. They did so, and decided that all was right. The wound was then closed with adhesive strips, and a compress with a tight bandage applied.

Having rode about twenty miles, in an intensely cold night, I was tired and went to bed, leaving directions to be awakened in two hours if the vomiting still continued. In two hours I was called up, and found all the symptoms decidedly worse. I then determined to open the wound and make further search for the difficulty. The tumor was readily brought down again and examined, when a stricture was found to exist, passing round the bowel in a spiral direction. As soon as it was cut, the tumor was dissolved, and passed back with instant relief. All the patient's distressing symptoms disappeared from that time, and in an hour a free passage was had from the bowels. He soon recovered and is still living.

CASE II.—A case, similar to the above, was met with in a patient of Dr. Walker's, in this city, that I operated on, on the 26th of April last, in the presence of Drs. Warder, Conner, Walker and Slocum, to all of whom I am indebted for their kind assistance.

The bowel had descended on the right side, and occupied the whole of the inguinal canal, and extended about one inch and a half below the external ring.

Nothing new or unusual was observed till the sac was opened and the finger introduced, which readily passed through the external ring, by the side of the bowel, up to the internal ring, and beyond where the tumor seemed to terminate. But, although the bowel could not be made to pass the ring, there seemed to be no stricture there. After some ineffectual efforts to detect a stricture at that point, the finger was withdrawn, and a careful examination of the tumor made from its base upwards, when a spiral stricture was felt, not passing directly, but obliquely round the bowel, a full half inch below the margin of the internal ring. This being nipped, the bowel was loosened and the whole tumor returned into the abdomen, followed by entire relief.

The patient recovered without any more unfavorable symptoms, and in one week after the operation left his room, supported by a truss.—*Western (Cincinnati) Lancet.*

CASE OF RUPTURE AND OBLITERATION OF THE BLADDER—DEATH IN FOUR DAYS.

BY E. M. PENDLETON, M.D., SPARTA, GEO.

THE subject of this unfortunate accident was a fine, healthy boy, about 7 years of age, belonging to Dr. Ferrell, of this county. He was lying on the floor of his cabin, about daybreak on Friday morning, the 18th of May, in a sound sleep. A lusty young woman, in walking about the room, trod upon his abdomen. He was lying on his back, and thinks her foot rested about the navel. It occasioned considerable pain, which caused him to awake and cry out. He was not considered seriously hurt, however, until the next morning, when I was sent for (a distance of five miles) to see him. Not being at home, I did not reach the plantation till noon—thirty-six hours after the accident. His pulse was now 102, and rather feeble; skin preternaturally cool; tongue slightly furred, with some thirst. The tympanitis was considerable, with extreme tenderness over the abdomen upon pressure. He had taken a dose of castor oil, which had produced an evacuation, and had passed some water. His countenance was depressed from pain, but did not exhibit the marks of a case *in extremis*. I ordered warm mustard poultices to the abdomen, a large dose of calomel, to be followed in three hours with a table-spoonful of ol. ricini. If the tenderness and swelling did not subside by 9 o'clock, P. M., to apply a large blister; which was done.

Sunday, 11 o'clock, A. M.—Pulse 125, still soft and feeble, and extremities cold; tympanitis intense, with great tenderness. Had passed no water for nearly twenty-four hours, but had drank a considerable quantity. Medicine had operated copiously—thick, muddy evacuations, with several lumbricoides. Blister had drawn well. Ordered spts. nit. dulc., half teaspoonful every hour, in pumpkin-seed tea, with mustard plasters to extremities.

Monday, 9 o'clock, A. M.—Pulse 106, almost imperceptible, with deathly-cold extremities. Had passed a little albuminous fluid *per ure-*

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