ART. XI.—Observations on the spontaneous Amputation of the Limbs of the Fætus in Utero, with an Attempt to explain the occasional Cause of its Production. By W. F. Montgomery, M. D., M. R. I. A., Professor of Midwifery to the King and Queen's College of Physicians in Ireland.

SEVERAL of the writers who have expressly treated of the pathology of the fœtus, in their enumeration of the accidents to which it is liable during its uterine existence, mention the fact of the occasional separation of portions of the limbs; \* and especially Desormeaux in his elaborate and able article on the "œuf humain" speaks of it as an instance of spontaneous amputation, which he attributes to the effect of inflammation and gangrene.

But none of these authors appear to have witnessed or examined any case of the kind themselves, nor can I find a satisfactory reference to any such case in any author within my reach, except those which are now to be noticed.

In the London Medical and Physical Journal, vol. liv. p. 38, Mr. Watkinson relates the following case. Being called to a lady, aged 20, in her first labour, which was natural and easy; when the child was expelled, "he discovered that the left foot had been amputated a little above the ankle, and the part nearly, but not quite healed."

The child was alive, and gasped for twenty minutes, when it expired. The mother had only gone seven months. On examination after the birth, the foot was found in the vagina, and it also was nearly healed. There did not appear to have been any hæmorrhage from the limb; the separated foot was much smaller than the other, which was rather turned inward;

Vide Billard, Maladies des Enfans, p. 623. Haller, Elem. Phys., tome viii. Murat, Dict. des Sci. Med. tome xvi. p. 70. Richerand, Elem. de Physiologic, p. 477. Desormeaux, Dict. de Medicine, tome xv. p. 404.

it showed no mark of putrefaction, but appeared to be in a state of perfect preservation. The mother said she had not been frightened, nor had any unpleasant circumstances occurred in her family to give her the least uneasiness; her circumstances were sufficiently easy to render unnecessary any over exertion on her part.

The parts here described were examined by the Editors of the Journal, and a sketch of them is subjoined to the description.

M. Chaussier examined two cases in which separation of a part of the forearm had taken place before birth; and in a third case of the same kind, he found the separated portion of the arm and the hand lying in the membranes, and as in Mr. Watkinson's case, the stump was healed.\*

Chaussier also attributes the accident to gangrene, as the cause which would most obviously account for its production; but it does not appear from his account, that there were present any of the pathological evidences of that condition; and indeed as a general explanation, this appears hardly admissible, when we recollect that in the first case related, the child was born alive, and neither the stump nor the part amputated, showed any symptom of disorganization or disease, nor was the latter even discoloured.

Without pretending to discuss the different causes likely or unlikely to produce so remarkable a change, I shall proceed at once to describe the case which occurred to myself, and which appears to me to offer one explanation at least, of the phenomenon under consideration.

About three years since, I was suddenly called on to see a patient who was miscarrying in the fifth month, with violent hæmorrhage. On examination, I found the fœtus partly expelled from the uterus, and lying in the vagina, from whence I readily removed it by slight pressure with my finger; the

<sup>\*</sup> Discours prononcé a l'Hospice de la Maternite, 1812.

cord was broken off, at about an inch and a half from the umbilicus; the secundines were retained for three or four days, without any return of hæmorrhage, and were then expelled whilst the patient was evacuating the bowels. She recovered well.

Observing the unusual figure of the head, I laid by the foetus for examination, and having placed it in clean water for the purpose, I was greatly struck with the appearances it presented.

The shape of the head was altogether deformed and monstrous, and the brain, which at the left side was covered only by the common integument, towered upwards like a helmet over the head; but the circumstance which most forcibly attracted my attention was, the appearance of distinct ligaments on the limbs; and examining closely, I found them in the following condition:

There were distinct threads, of, I presume, organized lymph passing from both hands to the legs; at one end these threads, which very much resembled the kind of thread called ardis. had formed a complete ligature round the middle of each hand, causing a distinct depression where it passed, the part of the hand below it being almost completely undeveloped; from the hands these threads descended, at both sides towards the legs, which were crossed, and surrounding them in this position, just above the ankles, so tightly, that fully two-thirds of their whole thickness were thereby divided, without, however, any breach of the skin having taken place, nor was there the slightest appearance of disorganization or discoloration of any of the parts, but as were the hands, the feet also were imperfectly formed, totally undeveloped, and of course misshapen. These circumstances are very accurately represented in the drawing executed by my zealous and accomplished pupil, Mr. J. Bullar, (see Plate,) and the fœtus itself is preserved among the preparations in my The mother was about 25 years of age, and at the museum.

time labouring under fever, but had been previously in perfectly good health, and had not met with any accident or circumstances of either bodily injury, or mental agitation.

From the condition of the limbs thus produced, and the impossibility of the parts below the ligatures continuing their growth under such circumstances, it seems exceedingly probable that had the child continued to live and grow, the parts of the legs below the ligatures would have been separated, and thus undergone spontaneous amputation. The formation of these threads, and particularly their application so as to stricture the limbs, are circumstances in explanation of which I do not feel prepared even to hazard a conjecture, nor can I find in the authors who have treated of such subjects, more than a mere allusion in some of them, to the fact, that the feetal limbs are occasionally separated, and by all it seems taken for granted, that mortification is the agent of the change.

The only passage which I can find apparently relating to the state of parts just now described, is in the Elementa Physiologiæ of Haller, tom. viii. p. 135; it is as follows: "Hue faciunt alius fetus, cui artus retracti, compressi, ligamenta stricta, &c. &c.," the last phenomenon he quotes from one of Ræderer's works, which I regret I cannot find in any of our libraries, and am therefore unable to ascertain how far it might bear upon or illustrate the fact before us. It does not appear from any passage in his writings, that Haller was himself aware of any such case from personal observation. He gives, indeed, a long list of extraordinary mutilations in the fœtus, attributed by authors to the effects of mental emotions in the mother, or of accidents sustained by her; but he immediately pronounces most of them to be "adeo fabulosa ut fidem auferant," and he obviously considers such cases as the result of imperfect development or of malformation, and not of separation or removal of the parts already formed, objecting to the authors who have furnished such descriptions, that they cannot even quote one instance, in which "manus truncata, aliusve artus in membranis fetus seorsim a corpore repertus sit;" two such instances at least, have, in the foregoing remarks, been laid before the reader, and with regard to the case which I have added, I will only venture to say, that it appears to me to afford at least one solution of so mysterious an occurrence, and should it appear, as of course it must, that the explanation thus supplied is so far unsatisfactory, that it is itself the result of a process equally inexplicable, it should be recollected, that very many indeed, if not all the physiological and pathological results which we witness, are, as to the mode of their production, enveloped in a similar cloud of obscurity: I think the fact which I have here added, leads us at least one link farther in the chain of causes and effects, and if so, even though the advance should be but of one step on the road to knowledge,

" Est quôdam prodire tenus si non datur ultra."

ART. XII.—Observations on the Treatment of various Diseases. By ROBERT J. GRAVES, M. D., M. R. I. A., King's Professor of the Institutes of Medicine, one of the Physicians to the Meath Hospital, &c. &c.

Many eminent physicians have expressed the opinion, that it is the duty of every one engaged in the practice of medicine, to record whatever he observes, capable of throwing light on the application of remedies or the nature of diseases. In compliance with this opinion, I have resolved to publish the following facts, without undertaking the task of embodying them in the form of a connected essay. As these facts refer chiefly to the effects of certain remedies on particular complaints or particular symptoms, the reader must expect in this communication, practical, not pathological remarks; an account of the success or failure of medicines, rather than observations on the nature of disease.

## DUBLIN MED: & CHEMT JOUR.: Page 140, Vol

