Sumat ter die olei morrhuae ʒij.

Sumat ter die ferri phosphatis gra. v.

March 20th. She talks very well; her grasp is much more steady, and she can clap her hands; but she is still quite unable to support herself on her feet. When she is raised by the nurse, her feet are rigidly extended, so that her toes alone touch the ground, and her body falls over the nurse's arm, as if without life; she can, however, clasp her arms round the nurse's neck, which hitherto she has not been able to accomplish.

March 31st. For some days she has been able to controul her upper extremities, to hold out her arm without moving it, and she nurses her doll. When placed erect, she can stand for a few seconds, one arm only being held, her whole frame becoming rigid by the effort, but not being jerked.

April 3rd. She makes an attempt at walking with the support of the nurse, throwing each leg in turn clumsily forward, and crossing one leg over the other; her awkward performance affords her much amusement.

℞ Strychniae gr. ʒ; alcohol ʒij; syrupi ʒij; aquae ʒvi; Sumat ʒss ter die.

March 16th. She walked the length of the ward to-day without help.

May 3rd. She walks quite steadily.

REMARKS. These two cases of severe chorea afford a very interesting contrast. Both presented, in a very marked manner, that absence of all control over the voluntary movements, and that loss of the power to direct the motor impulse to any particular part of the body which characterise the disease. Whenever any effort was made to set in action some one set of muscles, the motor excitement diffused itself over every part of the voluntary muscular system. This phenomenon was especially striking in the child, from the contrast between the usual state of perfect quiescence and the general muscular agitation which was produced when any motor impulse was transmitted from the brain.

But whilst, in the former of the two cases, the ordinary voluntary movements were exaggerated to such a pitch of violence as to verge upon a state of clonic spasm, in the second the muscular system was so much enfeebled as to approach a state of paralysis. The violent contortions, involving every muscle, in the one, were in striking contrast with the quietude of the other; with the perfect extinction of the power of utterance which she displayed, and the lifeless manner in which her limbs sank under her, and her body swayed over the nurse's arm. But notwithstanding the violence of the movements in the former case, the muscular action was entirely wanting in the character of true convulsion; there was none of the rigid and powerful contraction which marks that state, and the contractions, though so violent and incessant, were painless. Perhaps, if one might draw an analogy from electrical science, the difference may be described as between exalted tension of the nervous force in convulsion, and increased quantity in the case under consideration.

Dr. Russell thought the former case remarkable, not only for its severity, but also for recovery to have taken place after so long continuance of urgent symptoms (ten or eleven days). He had had an opportunity of watching three similar cases, all of them in girls between fourteen and sixteen years of age; one only recovered, and in her the severe symptoms lasted only three days. In the other two, both fatal—in one of which the muscular action assumed a true convulsive character—the duration of urgent symptoms was eleven days. One of these cases was further remarkable from the circumstance that the attack of chorea, which was clearly traceable to a terrible fright six months before, set in almost with the suddenness and violence of a fit of epilepsy, a disease which is sometimes produced in the same manner. As in our patient, mania was present in both the fatal cases, but in a higher degree.

The manner in which the disease lost its violent character in sleep was very remarkable. In the morning no amendment appeared to have been effected. At noon the patient fell asleep, and, after a sleep of eighteen or twenty hours, awoke, free from all serious symptoms. The very partial benefit procured by repeated full opiates was very striking, nor did the influence of chloroform extend beyond the time of its being inhaled, although during that period the benefit it conferred was so marked; unless, indeed, the third inhalation was instrumental in procuring the final and curative sleep which followed its employment in four or five hours.

ST. GEORGE'S HOSPITAL.

BURN BY THE RAYS OF THE SUN.

Under the care of E. CUTLER, Esq.

A LITTLE boy, aged 10, was admitted into this hospital on July 12th, severely scorched by the intense heat of the sun on that day. It appeared that he had been bathing, and, not having a towel, had amused himself by coming out of the water occasionally to bask in the sun, and then plunging in again. He had done this twice without feeling the worse for it; but the third time he went into the water, he felt a stinging, burning sensation, over the whole of his body, which soon amounted to intense pain.

On being admitted, there was found what the French call "a burn of the first degree", or a scorched state of the integument over the whole of the back from the shoulders to the buttocks; and on the left shoulder a large bulla beneath the cuticle. The pain was great, and there was much tenderness to the touch.

He was treated by the application of rags, wetted with Goulard water, over the whole of the scorched parts; and when last seen (July 15th), was rapidly recovering, the redness beginning to fade, and the parts becoming less tender. There were no constitutional symptoms, and there can be little doubt of his speedy recovery.

REMARKS. The rarity of this accident, especially in this country, has been our motive for recording this case. It is probable that the skin was further irritated by being plunged into cold water immediately after having been exposed to the unusual heat of the sun. It is an accident which we never had the opportunity of seeing before; but Dupuytren, in his treatise on Burns, in the *Leçons Orales*, mentions the solar heat as being occasionally the cause of severe burns, especially in tropical countries. "Many cases," he says, "are reported of persons who, having fallen asleep in the open air, have had various parts of the body burnt by the heat of the sun. In these cases, violent inflammation occurred, promptly followed by gangrene; and they died on the fourth or fifth day." He does not, however, give any reference to the cases which he has in mind.

Original Communications.

IMPERFORATE HYMEN: FATAL RESULT AFTER ITS DIVISION.

By THOMAS PAGET, Esq., Leicester.

PROFESSOR SIMPSON'S excellent lectures upon this subject, published in the *Medical Times and Gazette* of March 19th and 26th, omit to notice the facts that after division of the occluding membrane, even under the brightest prospect, death has ensued; and that dissection has shown that it resulted from the escape of treacly fluid into the peritoneal cavity through an opening in the Fallopian or ovarian sac.

The omission may have arisen from a judicious wish of the Professor to avoid overloading an elementary lecture, or it may have had its foundation in a want of perfect reliance upon the only recorded case of the kind, that of De Haen, noticed in Samuel Cooper's *Surgical Dictionary*, and by Jones and Sieveking.

As the latter of the two causes is a not improbable one of silence on the point; and as one of the only two of these rare cases for operation that have fallen to my lot was followed by the above named result, so distressing to the operator and horrifying to the patient's friends, it seems my duty to add my mite of credit to the narrative of De Haen, by asking you to give from my notes the following report of the cases.

CASE I. 1852. Miss M. W., in her eighteenth year, of fully developed figure and well nourished, but rather pallid, as are her family in general, had had no catamenial discharges, though for the last year or more she had suffered a monthly illness, with such pains as led Mrs. W. to expect a flow. Of late the abdomen had shewn enlargement, which suggested the suspicion that an occluded vagina was the cause of the patient's troubles. On examination the abdomen was found enlarged

by fluid at its lower part, while the upper yielded the usual sound on percussion. The enlargement bulged slightly in each iliac region, and fluctuation was felt as high as the umbilicus. The slightest separation of the labia vulvæ discovered a red tumour, also fluctuating. It was formed of a membrane, an extension, in fact, of the hymen along each side of the vagina to the meatus urinarius, which was considerably elongated by stretching; the membrane being pushed by fluid behind it into a convex form, so as almost to protrude between the labia. The vagina was effectually occluded.

October 14th. Previously to division of the membrane, the catheter was used, and about two tablespoonfuls of urine were withdrawn. A small trocar being then introduced with some difficulty, owing to the thickness and toughness of the membrane, a very dark fluid of syrupy consistence issued; and, the trocar being withdrawn, a common curved bistoury pierced the membrane at its posterior part. Its point was made to pass out near to the meatus urinarius, and the intervening length, one inch and a half to two inches, was divided at one stroke. The membrane, at least a line thick, and elastic, gave a snapping sound at the moment of its division, and three or four pints of the fluid gushed in a broad stream across the wash-hand basin, and beyond the bed. A broad strip of lint was inserted through the lips of the wound, a short distance into the vagina.

October 16th. She was free from all complaint. The patient wondered that she was still to keep her bed. A good deal of the dark fluid issued on moving. A very slight tenderness was felt on pressing at the left iliac region, not more than might be well accounted for by the change to collapse of the peritoneum and other parts, lately so much distended.

October 17th. The tenderness was gone. Some castor oil, taken yesterday, not having acted, she took this morning a pill of calomel and colocynth, followed by small doses of an aperient mixture every two hours; and, these failing, had an enema in the evening. After free action of the bowels, I was sent for at night, and found her under the symptoms of violent peritonitis.

October 19th. Leeches, fomentation, blister, and opium, had failed to relieve my patient; and she died this afternoon, about forty hours after the onset of peritonitis.

The after treatment of the operation had been the injection of tepid water, and the introduction of a tent of compressed sponge.

October 21st. *Post mortem* examination, made about forty-eight hours after death, with the assistance of my friend Mr. Macaulay, whose are the following notes:—

Externally, the body was well developed, the abdomen was slightly distended. Internally, on laying open the abdominal cavity, the peritoneum was found inflamed and thickened. Large patches of fibrine, the result of recent inflammation, were adherent to the convolutions of the bowels. On turning down the lower flaps of the abdominal parietes, a quantity of dark fluid, the same as that discharged from the vagina, gushed out from the pelvic cavity. This fluid was removed in considerable quantity, probably a pint and a half. After clearing it away, the uterus was found much enlarged, flattened, and firm, of about three times the size of a virgin organ. The Fallopian tubes and ovaries, on both sides, were enormously enlarged, capable of holding about a pint of fluid each. Both of these ovarian tumours had ulcerated openings with ragged edges, through which the contained fluid had passed into the abdominal cavity. The peritoneal surface of the bowels was generally in a state of inflammation, especially those portions in and near the pelvis. The vagina was carefully examined. The incision made for the discharge of the fluid was found sufficiently large to admit the finger into the passage, which appeared lax from recent distension. The finger also passed easily into the cavity of the womb, the cervix being undistinguishable, apparently obliterated by long continued distension by the retained fluid.

CASE II. 1859. E., also in her eighteenth year, fully developed, well nourished, even fluid, had had monthly ailment without discharge, and gradual increase of size. A thick, fleshy septum extended, as in the last case, from the internal commissure of the vagina to the meatus urinarius. It fluctuated with fluid behind it, and elongated the meatus. The only differences between the two cases were, first, that in the present one retention of urine had required Mr. Denton, to whom I am indebted for introduction to the case, to use the catheter on several occasions, probably when recent effusion had increased the elongation of the urethral aperture; and secondly, that here the abdominal enlargement did not extend to

its left side, which was free from fulness, flaccid, and resonant on percussion. Perhaps the not very rare congenital defect of absence of an ovary obtained in this case.

January 9th. After introducing the catheter, a free opening was made exactly in the same way as in the last case, and nearly three pints of the same kind of fluid, with flakes of mucus, gushed forth. Lint was inserted as before.

January 10th. On separating the labia, a small quantity of blood-red discharge escaped, and a coagulum about the size of a horse-bean.

January 16th. For the last three days there had been highly purulent discharge; about an ounce was shewn as having passed yesterday, and two drachms this morning.

February 2nd. The discharge was now only sero-purulent, and catamenia were reported as having been present for a day.

March 18th. Her sister called to report full catamenia, finished about a week ago.

May 23rd. She was in good health; the catamenia were normal. A ring of the fleshy membrane remained. It was firm, but readily admitted the finger, and seemed dilatable enough not to interfere with future function of the vaginal tube.

REMARKS. From these cases we derive fact and speculation bearing importantly upon the organs involved. Upon their physiology; for the distended state of the ovaries as well as Fallopian tubes, points to and confirms the catamenial function of the former. Upon their practical surgery; for the possibility of laceration or ulceration occurring, even after the removal of distension, must ever be kept in view when proposing to operate, and tempted to expect a happy result.

The pathology also of unsuccessful cases is illustrated; for the occurrence of peritonitis, named by Dr. Simpson, Jones, and Sieveking, and others, receives its explanation; while speculation is still afloat to explain in what way the openings in the ovario-Fallopian bag are effected, whether by ulceration or laceration. In the present case, a distinction between the ovary and tube was not made out, and the openings certainly had the appearance of being "ulcerated;" but the "ragged edges" scarcely certified the fact; and the non-appearance of blood cannot, perhaps, be held conclusive against the possibility of laceration. That either ulceration or laceration should occur after removal of the tension seems a mystery; yet the suddenness and violence of the peritonitis and death, as well as the appearances on dissection, proclaim the mystery to be a fact. In a successful case of this operation, narrated by Dr. Upshur, of Norfolk, U.S., and reported in Ranking's *Abstract*, vol. xviii, p. 222, it is stated that the flow of fluid was accompanied by "regular uterine contractions, which continued for twelve hours;" but the exit for the fluid being free, it is difficult to conceive that these contractions are the means of bursting or ulceration in parts more internal.

A case of this operation is given in the *Provincial Medical Journal* of December 10th, 1845. It occurred in the practice of Mr. Derington of this town, and is reported by Dr. Barclay. It was successful, and the only bearing it has upon the present paper is somewhat to contradict the rarity of the malformation. This, however, is admitted by all who have written upon the subject, and is established, one is entitled to say, by the fact that Rokitsansky gives but a mere intimation of its existence, and that Fergusson's judicious and full treatise on *Operative Surgery* names not the means of its removal.

I have to hope that no one will confound occlusion by this hypertrophied hymen with the more common union of the labia themselves by a mere webbing of cuticle, frequently seen in newly born infants and young girls, which I have only once found to remain so late as seventeen; and which is removable by tearing with a probe, without the loss of even a drop of blood.

ON UNUNITED FRACTURE.

By W. J. MOORE, Esq., H.M. Indian Medical Service, Bombay Establishment; formerly Senior Resident Surgeon at the Queen's Hospital, Birmingham.

[Concluded from page 520.]

THE continued use of long acupuncture needles, is, I think, a method of greater efficacy than any of those yet named.

M. Rayer pointed out that, when he excited irritation in the fibro-cartilage of the ear of a rabbit, the part was first softened, a yellow matter was next deposited in its texture, and finally, true ossification produced. M. Cruveilhier, likewise, observed different portions of periosteum, ligament, or cartilage, pass into ossiform state under the influence of stimulus. Miller, therefore, applied this knowledge, and the principle of subcutaneous sec-