matter of almost absolute certainty. With time and perseverance much may be accomplished for such patients. Strict attention to every means for improving the general health and promoting the tone of the body, as by generous diet, exercise, country air, sea and other bathing, cheerful society, regular but congenial employment, tonic medicines, especially quinine and the chalybeates, constitutes the necessary treatment. Local applications of belladonna, opium, and camphor combined, in the form of plaster, or otherwise, and occasionally the use of opium, conium, or Indian hemp, internally, are often temporarily very useful to patients of this class. The causes, however, of the constitutional condition must be ascertained, and no longer be permitted to exercise their influence. Now, it is partly with such individuals, or among those who are possessed of a similar constitution, that we find an irritability of bladder, originally induced by some palpable physical cause, as by a gonorrhœa, obstinately persisting despite of all treatment, although the lesion has long ago disappeared. The relationship between the nervous centres and the genito-urinary organs is of that peculiar and intimate character, that the symptom exists through the existence of an erroneous mental impression, while all physical cause is wanting, purely as a matter of habit; the bladder having been during some time accustomed to retain only a few ounces of urine, resents any addition, the individual becomes conscious of the want, and feels impelled to gratify it. It requires some determination to resist the suggestion, but in such case nothing more is needed in order to conquer the habit. We must only be assured that the cause is that which has been described, or the advice will be calculated rather to increase than to remove the evil complained of.

I have thus endeavoured to present a slight and hasty sketch of a considerable number of diseases, many of them widely differing, but in all of which the disordered function under consideration is a prominent symptom, dwelling chiefly not upon those which appeared to be most important in themselves, but upon two or three which appear to me to have received less of notice or elucidation in any work upon the subject with which I am acquainted. The degree of attention which circumstances have led me to give to this class of disorders, arising in part from advantages which I have long enjoyed at the Marylebone Infirmary, (unquestionably one of the best existing fields for their study which can be presented to the inquirer,) but convinces me how much remains to be achieved, how much more needs to be known respecting their pathology, and how much they deserve and will repay a laborious and patient study. At the same time there are perhaps no disorders to which humanity is exposed for which well-adapted treatment can afford so much valuable aid, either in the way of removing actual disease, or if this cannot be accomplished, by checking the progress of the malady, or at least by materially palliating its most painful and distressing symptoms.

Wimpole-street, Cavendish-square, April, 1854.

REPORT OF A CASE OF

INTUS-SUSCEPTION, WITH SLOUGHING OF THE INVAGINATED PORTION OF INTESTINE, AND ITS EXPULSION PER ANUM;

SUBSEQUENT GANGRENE OF LEG BELOW THE KNEE; RECOVERY.

By CHARLES KING, Esq., M.R.C.S. Eng., L.S.A.

W. P—, aged six, a little boy, with fair hair and complexion, and of previous good health, was attacked without obvious cause, on the 27th of October, 1852, with swelling and discoloration of the calves of both legs; they were mottled in appearance, painful, and cold to the touch. The next day these local symptoms had subsided, but severe and nearly constant vomiting came on; this was accompanied by constipation, with much pain and tenderness in the abdomen, especially in the right iliac region. I adopted all the usual measures likely to relieve such symptoms, administered injections per anum, &c., but without any marked beneficial effect, a little hardened feculent matter only being brought away by the enema. The patient continued much in the same state for four days—viz., until the 2nd of November, when the vomiting ceased, and severe general convulsions and insensibility supervened. He lay for twelve hours perfectly unconscious, with a widely-dilated pupil, unacted on by light, a quick, thready pulse, cold, clammy perspirations, and a mucous rattle in the chest. Under the influence of the most powerful stimuli he rallied. A blister was applied to the nape of the neck, and

one-grain doses of calomel administered every four hours. Beef-tea was also ordered to be taken *ad libitum*. Convulsions continued at intervals during twenty-four hours—viz., till the night of the 3rd, when he slept pretty well, and on the 4th seemed, on the whole, in a better condition. Complete consciousness had returned, but pain was still complained of in the right iliac region, and the whole abdomen was slightly distended and tympanitic. The constipation continued complete, and an injection which was this day administered returned offensive, and mixed with dark blood. Calomel was still given, but in half-grain doses.

During the next four days no material change occurred; no motions were passed from the bowels; no injections were administered, but fluid nourishment was given freely.

On the 7th of November the mucous membrane of the mouth was observed to be slightly ulcerated, but the breath had no unpleasant odour, nor were the gums swollen. The mercury was, however, discontinued. Not any active or urgent symptoms were now present, but the patient was of course much debilitated. On this evening (7th), being eleven days after the commencement of the symptoms, five days after the vomiting had stopped, and four days after the cessation of the convulsions, he passed the cæcum, with its vermiform process, and part of the ascending colon, and of which I have herewith sent a copy of a drawing, the original being in the museum of

Guy's Hospital, with the preparation of the intestine. The intestine, as it appears in this sketch, has been entirely opened, but at the time it was passed the cylinder was complete in many parts. The mass was passed without the patient's knowledge, and during sleep. The next morning he had a natural and solid motion, and seemed improving in condition. No change in the symptoms occurred during the next day or night (the 8th), and he slept well; but on the morning of the 9th, the left leg was noticed to have become cold, and on examination I discovered that the arterial pulsation in the groin, and below that point, had ceased. The patient, however, complained of nothing, was allowed a nourishing diet, and the limb was wrapped in flannel. During the day he had diarrhœa, which it became necessary to check by astringent medicines.

It will not be needful for me again to refer to the intestines, for since this time they have acted pretty regularly and naturally, and have given me no further trouble.

The patient's health was kept up by wine, tonics, &c., but the whole leg below the knee soon became gangrenous. This proceeded rapidly, and on the 18th of November I solicited Mr. Hilton's opinion on the case, especially as to the propriety of immediate amputation. The line of demarcation not being very clearly defined, the strength of the patient not being good, and bearing in mind the necessary loss of blood which must occur in performing amputation, it was thought better to rely upon the efforts of nature to repair the injury done, experience having shown that spontaneous separation by gangrene very often occurs satisfactorily below the knee-joint, a circumstance probably depending on the free arterial anastomosis from many and different sources at that part. Warmth in the limb was felt to about three inches below the patella, but beyond that point it was cold. The whole limb was now enveloped in cotton wool, and exposed only every second day. Infusion of serpentary and sesquicarbonate of ammonia were administered three or four times daily.

On December 1st the line of demarcation was distinct exactly across the middle of the knee-joint, the superficial parts below which were in a state of slough. The patient's health was tolerably good. The offensive effluvia from the dead structures being great, I cut through the soft parts about three inches below the patella, and then sawed through the subjacent bones. The stump was dressed with a nitric acid lotion. In a few days the whole of the remaining sloughs of soft parts had separated, and in such a manner that three openings were formed, an inner exposing nearly the whole of the internal condyle of the femur, an outer exposing the external condyle, and an anterior exposing the whole of the cutaneous surface of the patella. Below these openings a broad ring of living

vascular structure encircled the heads of the tibia and fibula; the divided ends of those bones of course protruded beyond the soft parts. The surface looked tolerably healthy and vascular, but it seemed too much to expect that granulations should cover the large surface of bone exposed; it was therefore considered whether it might not be advisable that the femur should be sawn through just above the condyles, and a flap to cover it made posteriorly, where the skin continued healthy, and well supplied with blood. Delay was, however, resolved on, as it was hoped that granulations might creep over the condyles, cover the patella, and that, on the separation of the dead ends of the bones, nature might effect her own cure, with a long stump and a good bearing point upon the knee. This hope has been completely realized. Strict attention was paid to the patient's health, and care taken in dressing, and on the 16th of January granulations had completely covered the condyles and the patella, and Mr. Hilton on that day twisted off the shafts of the tibia and fibula from their epiphyses. The openings thus made soon closed, and the whole stump commenced to skin over. Powdered bark was applied to the surface of the granulations, with nitric acid wash. Tonics and wine were given in full doses. This process of healing proceeded slowly, and occupied some months for its completion, the tender recently formed skin having a constant disposition to ulcerate in patches with the slightest deterioration of the patient's health; however I am now happy to report that the stump has completely healed, will bear pressure well, and is a remarkably good one. The epiphyses of the tibia and fibula which remain are turned back, and the limb now resembles in appearance a very high amputation below the knee. I append a sketch of it.

I may add that the pulsation in the left groin is still absent, and also that the patient now frequently suffers from indigestion. The attacks are somewhat acute, are attended with fever, pain in the abdomen, and terminate with slight diarrhoea. On one occasion an attack was clearly caused by vegetables which he had taken. It may be interesting physiologically to consider whether the diminished length of the large intestine may not have an influence in producing these symptoms.

Brunswick-place, City-road.

INFLUENCE OF VARIOLA AND VACCINIA.

By W. COOPER DENDY, Esq., M.R.C.S.E.

THROUGH the kindness of Mr. Skegg, of St. Martin's-place, I have seen, in the Strand, a case completely illustrative of the mutual influence of variola and vaccinia.

A girl, exhibiting no vaccine cicatrix, had attended and slept in the same room with her sister, affected with confluent variola. During this exposure she was vaccinated by Mr. Skegg, on the 18th of May, with fresh lymph. Three punctures were perfect. On the 22nd, premonitory symptoms of variola were observed; and on the 26th, papulae. This was the eleventh day from the vaccination. On the 30th, when I saw her, there were three very large, round, flat, dull-yellow pustules at the points of vaccination; variola plentifully scattered over the body. On the 2nd of June, eighteen days from the punctures, and seven days from the variolous papulae, the variolous pustules changed to a brown, filmy scale, rapidly falling off, nothing like maturation or secondary fever occurring.

The points both of curiosity and practical interest are, the synchronously modified or hybrid character of the two poeks, seeming, unless variola and vaccine be identical, to invalidate John Hunter's axiom; the antidotal or extreme mitigation of semi-confluent and extensive variola, although not absolutely prophylactic, and, above all, the total prevention of maturation

and secondary fever. *A priori*, we should at once pronounce, on the seventh day of a perfect areolar and progressive vaccine vesicle, complete immunity from variola; nor should we be prepared to see, as in this case, vesicles converted into unilocular cysts containing discs like the matured variolous pustule. A slight revolution has taken place regarding Jenner's adaption. Such a case as this, however, should make the objector pause, as it proves the value of vaccine far more than cases of prophylaxis, which may often be merely negative. These cases are very rare, but I could refer to five or six others. My point, however, would not be thereby strengthened.

June, 1854.

STRANGULATED OBLIQUE INGUINAL HERNIA; OPERATION.

By THOS. G. VAWDREY, Esq., M.R.C.S.E.

J. R.—, aged sixty-two, by occupation a fisherman, and occasionally a shoemaker, has been the subject of oblique inguinal hernia for some years, which hitherto had always been completely reducible, and gave no inconvenience as long as a good truss was applied. It has, however, occasionally happened, either from leaving off the truss, or from its getting out of repair, that the hernia has come down, and could not be reduced by the taxis without very great difficulty; the last occasion was about three months since, when the reduction was perfectly effected by the gentleman in attendance.

I first saw the patient on Saturday, the 29th of April, 1854, when I found him with all the general symptoms of strangulated hernia; his pulse, countenance, and skin, all in a very good state. On examining the hernia, and applying the taxis, about five-sixths of the gut could be put back, but the remaining sixth part could not be reduced. The gut had been down since the Monday preceding—that is, six days. I first suggested that the reducible part should be kept within the abdomen by the fingers, a long elastic tube introduced into the rectum, and a large quantity of warm water to be injected, with the hope of mechanically drawing back the constricted knuckle of intestine; it failed, however, to do so.

On Sunday morning, I decided on performing the operation, which I did in the way usually done by the late Mr. Liston. I first pinched up a fold of the skin corresponding to the length of the tumour; and having transixed the base with a narrow-bladed knife, I cut directly forward, and thus completed the first incision. I then carefully dissected down to the peritoneal covering, and having taken up a very minute pinch, I was able to make a small opening by using the knife in the horizontal direction. The opening was enlarged on a director, and the stricture divided in the direction forwards and upwards. It was then discovered that the strangulated knuckle of intestine was firmly adherent, so that it required some force to separate the adhesions before the intestine could be reduced. The reduction being effected, the wound was closed by sutures, and a compress and bandage applied.

Monday.—The bowels had been freely opened, and the patient doing well.

Tuesday, Wednesday, and Thursday.—Doing well in every particular. The wound quite healed by the first intention, so that there was good reason to hope for a favourable termination to the case. Soon after this, diarrhoea came on with great severity. The patient was ordered astringents, brandy, wine, animal food, &c., but refused to take either of them, excepting a small quantity of brandy occasionally. The result was that he got weaker and weaker, and died from exhaustion on the evening of the sixteenth day after the operation.

The points of interest in the case appear to be—first, the very long time the hernia had been down without becoming gangrenous; secondly, the firm adhesion; and thirdly, the patient having sunk from diarrhoea after perfect relief to the stricture had been afforded.

St. Austell, Cornwall, June, 1854.

ON ALBUMINOUS URINE IN CONTINUED FEVER.

By JOHN W. TROTTER, Esq., M.R.C.S.E. & L.S.A.,

LATE RESIDENT MEDICAL OFFICER, ST. MARY'S HOSPITAL; ASSISTANT-SURGEON, COLDSTREAM GUARDS.

THE presence of albumen in the urine, under any circumstances, is a fact of much importance. Though this appearance is sometimes transient, and its coincidences trifling, it is still more frequently associated with grave and serious incidents,