no further consideration. The chemical destruction of the animal, no doubt, helps the development of the vegetable; but the one is not produced by a transformation or modification of the molecules of the other. The same kind of independent existence of parasites is seen in those cases in which the shaft of the hair is retained in the follicle, while its root is totally disconnected with the formative process. The hair is in this case, to all intents and purposes, a dead structure, yet the parasitic vegetation luxuriates; and other cases might be quoted. The existence of budding is another feature of distinctive significance as to the vegetable nature of the parasites. This will be referred to again.

The occurrence of an union of cells as an active process may be mentioned. This is a fact which every one will admit. Hebra, Mr. Wilson, and others seem to recognise, as the universal mode of the production of sporules, the constriction of filaments, and separation of the constricted portions, as well as the bidivision of free cells. This is surely an error of observation. The sporules are primary in point of existence, therefore cannot be formed by division of the mycelial cells. Besides, the larger are seen to be produced by the enlargement of the smaller cells. In the case of the torula, this is seen to an extreme degree in its endogenous growth. Saving in the fructification, which is rare in human epiphytes, the most usual process is an increase by endogenous formation, and also the formation of the mycelium by a union of cells (with superadded budding); and in the mycelium the same endogenous growth obtains. Now, nothing of this complete kind exists in the epithelial tissues: endogenous growth, yes, but not a true junction and union of cells. I refer now to the epithelial tissues only, which are those concerned in the discussion.

Parasitic disease can undoubtedly be produced by the introduction of the germs from without, provided there exist a suitable soil. The experiments of various observers will occur to the memory of most readers. In accordance with all that is known of fungi generally, it must be accepted as certain that vegetable growths arise in the case of "porrigo", of favus, and such like, "as they do if a piece of melon or a bit of cheese, not over dry, be placed in a cupboard"; that is to say, in accordance with the same general laws; or, in other words, they never flourish upon "healthy" surfaces, though it is difficult to define clearly the exact state of pabulum by external manifestations; but that some favourable condition of soil, some deviation of the nutritive process, exists, must be admitted. Well, then, introduce the sporules of a fungus to a person so nutritioned, and parasitic disease will result. Does not the contagious character of tinea make a dead stand against the acceptance by us of the theory of "granular degeneration"? Mr. Wilson states that, in a certain sense, "mucus may be viewed as a parasite receiving nutriment from the body, but not shape, nor claim to vitality"; and adds, in a foot-note: "In this sense, we are willing to accord to the nosophytodermata the title which has been assumed for them of parasitic diseases, but not as organisms originating from without, and intruding upon the tissues of man, as the phytopathologists claim." Yet he does not notice the bearings, upon this question, of artificial inoculation and contagion. It has been pretty surely shown that, in the instance of Madura foot, which presents a larger amount of fungus than any other disease, the germs are derived through wounds in the feet; and it may not be uninteresting to observe here, that Mr. Wilson's theory could not explain the development of the chionyphe Carteri in the carious bones of the foot. Looking for a moment to the applicability of the word parasite to

the case of mucus (pus), these latter have most special and useful functions to perform, without which nature would suffer very materially. The term parasite, as given to them, leads one to form by far too low an estimate of their nature and worth, and detracts from the beauty and perfectness of conservative nutrition.

[To be continued.]

RECENT INTUSSUSCEPTION.

By E. COUSINS, Esq., F.R.C.S.

ON December 13, 1862, a male child, aged 21 months (the same patient whose case in a former illness is reported in the BRITISH MEDICAL JOURNAL for June 21, 1862), came again under my care. The child was said to have had diarrhoea for the last day or two, supposed to be connected with teething. At 1½ A.M., the nurse gave it two teaspoonfuls of castor oil, which acted before 3; giving a not unhealthy-looking liquid evacuation, on which oil floated. The child, however, strained much in passing it, and seemed faint. He then had frequent paroxysms of pain and slight tenesmus, during which he writhed much, and then fainted, remaining pale and more or less unconscious till fresh torminia appeared to rouse him. He occasionally vomited a few teaspoonfuls of serous fluid with greenish flakes. At 3½ A.M., he passed about half an ounce of bright blood *per anum*, with tenesmus, and then fainted (as usual after each fit of pain). At 4 o'clock, I found him in a state of syncope, with the pulse barely perceptible, even during the fits of restlessness. These occurred every ten minutes; in the intervals between them, the abdomen was soft and flaccid, and free from tenderness or from any discoverable tumour; and the right iliac region and hypochondrium were sensibly full; the epigastric, umbilical, and left iliac regions, were depressed; the space from the umbilicus to the pubes was moderately full. Whilst palpating, the transverse colon was felt to harden under the hand, and formed a well-defined hard tumour, which could be traced, though less hard, through the region of the ascending colon to the cæcum. Evident distress began after this; the rectus muscle hardened so as to obscure the tumour; and the child writhed severely. Laudanum was given, with a little sal volatile. The fit of pain passed off; and during the subsequent syncope the tumour again became perceptible, and then gradually became less and less defined, and nearly ceased at last to be distinguishable, until the approach of the next paroxysm.

The diagnosis was, intussusception of the ileum through the ilio-cæcal valve, reaching half-way along the tract of the colon. Some brandy being given, inflation *per anum* was performed with the stomach-pump at seven o'clock. The abdomen was rendered very tense with air, which in about three minutes was heard suddenly to escape with a gurgle into the small intestine; and on examination, the tumour was found to have disappeared, while the small bowels were discoverable as an elastic mass surrounded by the easily traced colon. It was interesting to note the remarkable change in the feel of this organ, during an ordinary peristaltic contraction of it which followed in a few minutes after the operation. The pulse recovered its tone and fullness instantly afterwards, and the cheeks regained some colour. The child seemed to rest for about a quarter of an hour, and then showed indications of returning playfulness and interest in those around him. He was ordered rice or barley-water with cream as an exclusive diet.

1 P.M. He had had a quiet sleep; after which he craved for food; then had a bloody stool.

8 P.M. He had had two evacuations; the last was

said to contain a small particle of faecal matter. There was no pain nor tenesmus, nor tenderness of the abdomen. The child was playful all the afternoon, and now fast asleep; having had a powder of hydrargyrum cum creta and Dover's powder, of each a grain, and a linseed-meal poultice.

Dec. 14th. He had had a good night, and had passed two evacuations; the first faecal, but loose, with a patch of mucus tinged with blood; the second devoid of blood, and with abundant bile, but still relaxed. He was ordered to have a grain of extract of logwood, and five minims of ipecacuanha wine, with some syrup, in half an ounce of aniseed water, every four hours, and to repeat the powder.

8½ P.M. He was comfortably asleep; he had been full of play all day, and hungry. He had had one semisolid evacuation.

LARGE CALCULUS IMPACTED IN URETHRA: REMOVAL.

By T. MORLEY ROOKE, M.D., Cheltenham.

THE following case presents some features of interest. I was called one evening, two or three weeks since, by a gentleman, to see his stable lad, who, I was informed, was suffering from retention of urine. I found the patient, a small sized but healthy youth of 18 years of age, in considerable suffering, with his bladder distended up to the umbilicus; he had passed very little urine for thirty-six hours. The retention had been at first partly overcome by strong expulsive efforts and the aid of a warm bath, but more lately it had been complete; there was no history of gonorrhœa recent or old, nor of anything likely to cause stricture. On proceeding to explore the urethra with a catheter, the instrument immediately struck upon something hard and perfectly resisting; and on opening out the lips of the meatus, I could plainly see, about half an inch within the canal, what looked like an urinary calculus. I could also feel a hard rounded body, on pressing the glans, conveying the impression of something of the size of a small marble. I at first endeavoured by external manipulation to press the substance forward; but, this totally failing, I passed the blades of an ear-forceps with broad concave-flattened points on each side of the stone, and was enabled firmly to grasp it; but, although I used for more than half an hour every effort of force and cunning to extract it, so firmly was it wedged, that it would not move a hair's-breadth; indeed, the stone at length broke under my forceps. I finally saw no other plan than to slit up half an inch of the mouth of the urethra; this I accordingly did, and then, though still not without some difficulty, extracted the calculus. Of course, the bladder was immediately relieved. The wound of the urethra was nearly healed in five or six days, its urethral edge having adhered by the morning after the operation.

The stone was of an ovoid form; but, it having broken, I cannot give its exact dimensions; the main fragment, probably a little more than half, measures exactly half an inch in its transverse diameter, but the bossed character of its surface no doubt much aided its impaction. The weight of the same fragment is thirteen grains; I should estimate the whole as having been about twenty-two grains. According to my analysis, the composition is oxalate of lime with a little carbonate.

Looking to the age and the small make of the patient, I should think a similar case of a calculus of such dimensions being forced so far along the urethra must be extremely rare. I cannot myself find one on record.

Reviews and Notices.

EXCISION OF THE SCAPULA. By JAMES SYME, F.R.S.E., Surgeon in Ordinary to the Queen in Scotland, etc. Pp. 35. Edinburgh: 1864.

EVERY one has had personal experience of the truth of the old adage, "A great book is a great nuisance." We are glad, therefore, to be able to tell our readers that Mr. SYME's volume is small, and its value great. It contains the history of three cases of excision of the scapula; and the value of the history is shown in the fact that it establishes a new operation in surgery. These cases prove that the entire scapula, either with or without the arm, may be removed without much difficulty, and without dangerous loss of blood; that the wound will heal quickly and well; and that the arm, if preserved, may be strong and useful.

Mr. Syme first performed this formidable operation in 1856, the patient being an old woman seventy years old. The tumour appears to have been of a cerebiform kind. In this case, the wound healed; and the patient died, not from any of the ordinary results of operations, but apparently from natural decay. She survived the operation two months and a half, and lived long enough to establish, in Mr. Syme's mind, the propriety and feasibility of the operation.

In the next case, in 1861, Mr. Syme removed the scapula in a man forty-three years of age. He had previously removed, in 1860, the diseased head of the humerus in this man; and, a year afterwards, observed a tumour over the shoulder, which gradually enlarged, and became eventually the subject of his second excision of the scapula. The tumour weighed between four and five pounds, and was of a suspicious nature. The man completely recovered, and was able to lift heavy weights with his arm; and, fifteen months after the operation, was in perfect health, and engaged as a letter-carrier.

In the third case, Mr. Syme in 1862 removed a fibro-cartilaginous growth of the head of the humerus, which did not affect the joint; and the patient rapidly recovered. Some months later, a fibro-cartilaginous cyst, of the size of a walnut, was removed from under the cicatrix. Shortly after this, a swelling commenced in the scapular region, which was rapidly developed, extended into the axilla, and overlapped the humerus. In this case, the arm could not be preserved. The tumour, which was removed with the scapula in May last, was of exactly the same character as the morbid growths previously excised. No fewer than nineteen ligatures were required to secure the blood-vessels in this case. The patient recovered completely; and, the last time Mr. Syme heard of him, he was out with the hounds.

An operation of this kind may be truly called a triumph in surgery. It manifestly is a means of prolonging existence, and of snatching man from the immediate prospect of a certain and very painful death. The profession has to thank Mr. Syme for having once again widened the domain of surgery. The details of his cases will, no doubt, be carefully studied by all surgeons.