the patient can submit no longer, and if the patches are local and large a piece of lint should be saturated with the tincture and tied on for several consecutive hours, even days, if necessary. The treatment must be persevered with until the whole of the morbid material is cast off; and when this occurs we shall find the true skin smooth and shining, looking like gutta-percha tissue, stained as it is with the tar. The misfortune is that this treatment is tedious and objectionable for both nurse and patient, and can only be carried out efficiently in a hospital or medical home, or at least with the assistance of a trained nurse. When the patient has sacrificed three or four weeks to this treatment the general result has been satisfactory, and some cases have, so far as I know, been completely cured; but I doubt whether any measures are capable of preventing a relapse. It is scarcely necessary to add that no claim is raised for originality in the application of soap, spirit, and tar in cases of psoriasis. Hebra, that king of dermatologists, was, so far as I know, the first to use the combination.

A CASE ILLUSTRATING AN EARLY STAGE OF HERNIA OF THE BLADDER.

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THE comparative rarity of hernia of the bladder and the little knowledge possessed of the mode of formation of this rupture may excuse the publication of the following case.

A man aged thirty-one came under my care with a double inguinal hernia. He had lived a life of undisturbed leisure, was the reverse of energetic, and took little or no exercise. His whole muscular system was below the average in the matter of development, his tissues were very flabby, and although he was by no means corpulent he had been increasing in weight for some little time. The abdomen was lax and unduly pendulous for a man of his years, and the amount of subcutaneous fat in the parietes was large. He had noticed the herniæ for about two years, the left rupture having appeared before the right. A well-fitting double inguinal truss had been worn for the last twelve months. The right hernia was the larger of the two. It formed a swelling which was about the size of a hen's egg as it projected beyond the inguinal ring. It had reached but a little way into the scrotum. It felt soft and was peculiarly rounded. The impulse on coughing was marked, and the protrusion was perfectly reducible. I noticed that while the hernia could be most readily replaced it appeared again the moment the fingers were taken away. The contents appeared to be omental. The ring readily admitted two fingers. The hernia on the left side was very like that on the right. The ring was about the same size, but the protrusion was much smaller. The patient complained of strange, indefinite pains about the lower part of the abdomen. He had no bladder trouble, and his chief complaint was of a constant sense of painful weakness in the groins. He had some pain, moreover, along the inner side of the right thigh. He was very anxious to have both herniæ treated by operation. He was much worried by wearing a truss, and expressed his intention of discontinuing the apparatus in any case. It was pointed out to him that the ruptures could be perfectly supported by a truss, and that an operation was not a necessity. He claimed, however, that the truss gave him so much inconvenience that he could not submit to the continued wearing of it. This persistent sense of discomfort in the groin, even when an admirable truss was being worn, was a very noticeable feature. I proceeded to carry out the operation for the radical cure. On exposing the external ring on the right side I found a soft, well-defined, and well-rounded protrusion behind the structures of the cord. It looked like an omental hernia in a very thin sac, but an examination showed that it was in reality a retroperitoneal fatty hernia. When I had removed the fat composing this reducible mass I found in its interior a peritoneal sac about one inch and a half in length as measured by the part drawn out beyond the external ring. This sac, which was quite empty, was ligatured and removed. The removal of this fatty hernia revealed another and larger fatty protrusion behind it. There seemed, indeed, to be two herniæ projecting from the inguinal canal, one behind the other, and in front of the anterior of the two was the cord. The removal of the fat

from the second protrusion disclosed in its interior a strange-looking mass which was soon shown to be the bladder. The fat seemed to be adherent to it. When the fat was dragged upon the viscus was drawn out of the ring, while a very little pressure served to reduce it. When reduced I could readily pass a finger into the ante-vesical space. No serous membrane came into view. An examination of the muscular fibres of the exposed bladder made it apparent that the part protruded was the extreme summit. The extruded portion when dragged forward projected (or rather could be made to project) about two inches beyond the external ring. I removed as much fat as possible and closed the external ring with sutures. The hernia on the left side was also a fatty hernia which had come down behind the cord, and which likewise contained in its interior a small empty peritoneal sac. The patient's recovery was uneventful.

Remarks.—This case certainly serves to illustrate the "traction" theory of hernia as held by some. There is an increase in the subperitoneal fat; it grows in a direction of little resistance—viz., along the inguinal canal—and drags a small pouch of peritoneum after it. In the same way the fat in the ante-vesical space extends along the inguinal canal and drags a portion of the bladder after it. Had the fatty hernia extended to the scrotum the hernia of the bladder would have been quite considerable, the protrusion would have been free of any sac, and the viscus would probably have become more or less irreducible. The case certainly shows the part a fatty hernia may play in producing a protrusion of the bladder.

Wimpole-street, W.

ON A SEVERE FORM OF ULCERATIVE COLITIS OCCURRING IN YOUNG CHILDREN IN THE ARGENTINE.

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As the subject of colitis seems to be attracting some attention just at present, and as an *addendum* to Dr. Hale White's article on "Colitis" which appeared in THE LANCET of March 2nd, I should like to describe a form of severe ulceration of the lower bowel which I have observed as occurring in young children in Buenos Ayres, and which differs very much in its clinical aspects from the usual forms of colitis referred to in that article and in the various textbooks. The form I am about to describe must be carefully distinguished from the other and acute forms of intestinal disease which are commonly observed in semi-tropical climates. The Argentine Republic over its greater extent, and more especially the province of Buenos Ayres, enjoys a semi-tropical or temperate climate, subject, however, to great and sudden changes in temperature. The hot months are January and February, with a mean temperature of 80° to 85° F., with occasional exacerbations to 90°, 95°, or even 100° in the shade, this excessive rise being usually accompanied by a soft north wind blowing from the extensive swamps of the Upper Parana and Matto Grosso districts of Southern Brazil. This north wind produces an extraordinarily depressing and nervous effect on both native and foreign residents. Lassitude, disinclination for bodily and mental exertion, and a peculiar irritability of temper are felt alike by all classes during the two or three days the wind lasts. On such days special precautions must be taken with regard to fresh foods, milk turning sour in a couple of hours, fresh meat beginning to decompose in three or four, while certain fruits rich in sugar will also ferment in a few hours. This great heat culminates in a storm of wind often accompanied by hail, and the temperature drops perhaps 25° or 30° in an hour's time. It is at such times as these that acute and fatal forms of diarrhoea may occur both in adults and in children, in the latter case chiefly due, no doubt, to the ingestion of milk rendered toxic under the influence of the microbe-bearing north wind. Children under two years of age succumb much more rapidly to this form of diarrhoea than older children using a more mixed diet, and adults, though they suffer severely, seldom die from acute attacks. Clinical and pathological observations show that it is the upper part of the intestinal tract which chiefly suffers, and there is often vomiting at the beginning of the attacks, which

are always sudden and violent. The chief symptoms are: 1. Frequent evacuations (the first being often natural and formed) very large, dark in colour, slimy, offensive, and accompanied by great pain and some tenderness over the upper part of the abdomen; towards the end of a fatal case motions become thin and watery though still dark in colour, very frequent, the pain disappears, and there is some tenesmus, due, however, to local irritation of the rectum and anus; the motions are never blood-stained, and mucus is rarely voided alone. 2. High fever, from 103° to 105° being common; no rigors; towards the end the fever drops, except in the very acute cases (under twenty-four hours) when the temperature usually rises to 105° or 106° . 3. Great restlessness and a very anxious expression, very great thirst. 4. Tongue much furred, becoming quickly brown and dry. 5. Abdomen tender in its upper part, but soft and doughy; no tympanitis as a rule. 6. Pulse quick and small from the very commencement. 7. In fatal cases coma precedes death, which occurs from exhaustion. I have given this brief description of acute disease attacking the upper portions of the intestinal tract because it is the only form I have met with which differs from the usual varieties described in textbooks, such as summer diarrhoea, cholera infantum, true or Asiatic cholera, &c.

Returning now to our more immediate subject—ulcerative colitis—the cases I have seen have all been in children under four years of age, the most frequent age being from twelve to twenty months—that is to say, a few months after weaning, and the child out of arms and being able to walk a little; this latter point is important as bearing on the causation. The children of all classes are liable, the differences in nutrition between the richer and poorer classes in Buenos Ayres not being so marked as in the more crowded populations of the larger European capitals. Most cases occur in the early winter (June and July), more especially if cold and wet come together rather suddenly, and this offers the only clue towards the discovery of the etiology of this remarkable disease. Most of the houses in the city possess large open courtyards (*patios*) and often small gardens, and the children live to a great extent an open-air life, and on the advent of the cold and damp winter are allowed to run about perhaps too freely, and so from sitting down on the damp grass or on the marble steps may catch cold, and the lower bowel become affected directly. Casting about for a cause, this seems to me to be the only likely one.

I shall now give the description of a severe and typical case which occurred in my own practice. An infant aged fifteen months, male, of English parentage, no previous illness, strong and well nourished, though somewhat backward in teething, had been weaned at ten months, the mother rather overtaxing her strength in nursing so as to bring him well over the hot weather before beginning the new diet, which consisted chiefly of groats prepared with milk, prepared food, cracknels, and well-made beef-tea once or twice a day, with an egg occasionally. The child threw, and at the time of his illness (July) was allowed to run about the *patios* and garden, although the weather had turned somewhat cold and damp. On a Thursday night he suddenly awoke with a croupy cough, and when I saw him he was flushed with a temperature of 100.5° F. and had a short brassy cough, the pharynx being normal in appearance. I treated him with drop doses of tincture of aconite, minute doses of Dover's powder, and hot turpentine stupes to the neck. Next day the croupy symptoms had passed off, the temperature was down to 99° , and the bowels were fairly moved after small doses of calomel. On the Friday night he had very slight return of croupy symptoms, and on Saturday morning he appeared to be well. But in the afternoon he began to pass clear mucus from the bowel without any pain or straining, and during the next two or three days mucous discharges alternated with fairly normal motions every six or eight hours, and there was very little, if any, constitutional disturbance, the temperature varying from 99° to 100° , the tongue fairly clean, the appetite good, and but little restlessness at night. During the fourth and fifth days the mucous discharges became more abundant, some of them being distinctly pink in colour; the motions were infrequent, but very large, rather slimy, and slightly offensive. On the seventh day he began to pass the masses of mucus characteristic of the disease, some being about the size and shape of a cricket ball, and of a peculiarly dark red colour like port-wine jelly; there would be perhaps not more than two or three of these masses in the twenty-four hours, and in between these would be a fair'y good motion,

though loose and slimy; the appetite failed somewhat, and the tongue was only slightly furred; sleep was rarely interrupted, and there was absolutely no pain or tenesmus on defæcation; but the temperature went up to 102° . On the eighth and ninth days the masses of mucus were mixed with membranous shreds and sloughs decidedly fetid, and the motions became looser, flaky and curdy, and horribly offensive. On the tenth day in the afternoon the temperature suddenly went up to 105° and the pulse to 130, and the child for the first time threatened to become collapsed. I gave him a warm bath rapidly cooled down with ice, and the temperature came down to 102° , and he became bright again; he continued taking food well and enjoying very fair sleep. During the next few days he passed the masses of mucus mixed with shreds of sloughy membrane, and on several occasions black gangrenous masses horribly fetid. Small quantities, never exceeding a teaspoonful, of bright red blood usually followed the gangrenous sloughs, evidently coming from the edges of the ulcerated patch. After a particularly good sweeping of the surface of the ulcer (for so it seemed to me) there would follow two or three slimy offensive motions not showing a trace of membrane or slough. By this time the child had become somewhat emaciated and pale, but his general appearance was no index of his grave condition. For some days he remained more or less in the same state, passing mucus, sloughs, and bright blood, though in less quantity, and the motions were large, loose, and foul, but not so frequent as to exhaust the little patient alarmingly, and during this trying time he rarely refused his food, slept fairly well, and was with difficulty kept in bed during the day; the temperature never rose again. The symptoms gradually improved, the discharge of blood ceased entirely, sloughy-looking masses were passed at longer intervals, and the motions improved in consistence and appearance, and about five weeks after commencement of the illness he was able to be moved to the suburbs. Convalescence was slow and vexatious; the bowels were irregular, with occasional mucous discharges and fetid motions, and, strange to say, the appetite became capricious and poor; the attractions of a large garden and fine weather were trying to him, and he was liable to overtax his strength in getting about. Ten months afterwards he was brought to England, where he now is perfectly well and strong; but on the voyage he had a short but mild relapse, with mucous discharges and fetid motions.

I confess I did not at first recognise the gravity of the case, the absence of fever, constitutional disturbance, and tenesmus dispelling all fear of dysentery. But on the appearance of the first masses of blood-dyed mucus and the rise of temperature I sought the aid of Dr. Ricardo Gutierrez, senior physician to the Children's Hospital, who, in view of the immense quantities of blood and mucus that were being passed, and especially in the presence of sloughs, gave a very serious prognosis. For the first day or two we gave a castor-oil emulsion, one teaspoonful every two hours, with two or three grains of powdered salol every four hours as an intestinal disinfectant, the object being to keep the bowels fairly loose and so prevent any damage to the ulcerated surface, and also to remove intestinal accumulations as quickly as possible and to hinder stasis. This we followed up with calomel in frequent minute doses (one-fifth of a grain), combined with opium (one-third of a grain) and salol (one grain). By these means we kept the intestinal circulation going well, and perhaps avoided retention and absorption of toxic material. Later, when the discharge became alarmingly abundant and the large ulcerating surface apparently increasing, recourse was had to astringents, both vegetable and mineral, but they failed to make much impression, the best being hæmatoxylin mixture, which, however, was often passed unchanged. At the worst and gangrenous stage we tried rectal injections of all known astringents, including raw and clear starch and opium, extract of rhatany, extract of hamamelis, tannic acid, alum, iron, turpentine, nitrate of silver, permanganate of potash, carbolic acid, &c., with but little appreciable effect, the best perhaps being liquor ferri perchloridi, twenty or thirty drops per ounce of water. Small injections only were used, not exceeding 3 oz. of liquid, for fear of dilating the diseased and thinned-out colon. In subsequent relapses I gave the calomel, opium, and salol powders, the hæmatoxylin mixture, and the nitrate of silver or iron injections. But in future cases, so soon as the diagnosis is established, I mean to use enteroclysis to its fullest extent, giving rectal injections, with the long tube, of

astringent and antiseptic solutions, not less than a pint or a pint and a half at each injection. This treatment is much recommended by the Italian school, but it is obviously only applicable in the earlier stages. A properly regulated diet is exceedingly important, the indications being to give a bland, nutritious, non-irritating food, easily absorbed and grateful to the patient, who has to fight it out but poorly aided by drugs. But when curdy, fermenting masses appear in the motions the diet must be varied, and we used with great advantage fresh and rather weak beef-tea, fresh veal broth, and calves' feet jelly; and, when all these were refused, raw meat, prepared by finely scraping good fresh mutton, mixed with quince jelly, was well taken and well digested. In convalescence prepared food twice a day and underdone mutton or beef are the best, with small quantities of the best old port wine you can get. Rice water, linseed water, weak tea, and slightly acid drinks may be given to relieve thirst.

From the foregoing description it will be seen that this disease differs very considerably in its clinical symptoms from dysentery and ordinary colitis and so-called "mucous disease." In the first place, the large masses of mucus are peculiar—they are "blood-dyed," if I may use the expression, just like lumps of dark wine-jelly, and at first contain no liquid blood or even small clots; they are voided easily, without straining; there is no pain, either preceding evacuation or after, and fairly good motions at first follow these masses. Later, the motions become slimy and blood-stained, or accompanied by small clots of a bright-red colour, which may be seen on the top of the motion if the child has used the chamber. In the later stages and in the worst cases sloughy masses and black, gangrenous shreds, smelling horribly, may be passed. From the increasing size of the masses of mucus in the above case, their compactness and their shape, we could easily deduce that the ulceration was more or less circular in shape, that it advanced by the circumference, that the older portions first sloughed and then became gangrenous, and that at one time the ulcerated patch must have measured at least six or seven inches in circumference. The pathological sequence of events was apparently as follows: (a) catarrhal inflammation of the mucous coat just above the sigmoid flexure of the colon; (b) increasing hyperæmia and venous vascularity giving rise to wine-coloured mucous discharges; (c) breaking down of the surface of the mucous membrane with formation of sloughs, and a process of auto-infection due to development of toxic inflammatory products; (d) gangrene and extension of ulceration along the edges; (e) constitutional disturbance due to absorption of morbid products; (f) limitation of infective process and further ulceration by the formation of a protection zone in the lymphatic system just below the muscular coat; and (g) healing of ulcer from the circumference to the centre. The perusal of the clinical history of the case will clearly prove this series of pathological changes; in fact, as Dr. Gutierrez put it to me, the diagnosis, course, and even treatment of these cases can be made out by mere inspection of the napkins and dejecta alone. What connexion there was between the laryngeal catarrh of the preceding two days and the intestinal attack I am not prepared to state. In another of my cases a similar sequence took place; but Dr. Gutierrez assures me he has not observed the complication, if complication it really be. Another very interesting point in this case was the comparative ease with which nutrition was kept up, differing in this respect so widely from dysentery, the explanation being that the ulcer, large as it was, was situated at the extreme end of the alimentary tract; secondly, that blood infection and constitutional disturbance were comparatively slight in proportion to the large local lesion; and, thirdly, the child was kept as much as possible to his usual regime, being encouraged to take his food and to sleep at his accustomed hours. Ultimate and complete recovery is usually retarded for two or even three years, nutrition being but slowly carried on. In my case, in spite of considerable emaciation and wasting of legs, buttocks, and upper extremities, recovery was complete within the year, and due, I think, to very efficient nursing and a very great care in the preparation of the food during the acute stage. Another important point is that, according to Dr. Gutierrez, cicatricial contraction of the lumen of the bowel never follows, and in my case—one of the worst he had ever seen—the child is now (eighteen months after illness) having motions of proper shape and size. In all these points the natural history of the disease differs

widely from dysentery, with which the earlier symptoms may be confounded, and as a remarkable instance of extensive local intestinal ulceration with recovery I have ventured to put the case on record *in extenso*.

Buenos Ayres.

TWO CASES OF FÆCAL FISTULA TREATED BY RESECTION OF BOWEL.

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IN THE LANCET of Jan. 13th, 1894, I recorded two cases of resection of small intestine, gangrenous in hernia, one of which was primary and fatal, the other secondary and successful. The notes of two more recent cases of secondary resection—one of large bowel which had been ruptured by injury and was followed by fæcal fistula, and the other of small gut which had in all probability been gangrenous in a femoral hernia, and was likewise followed by fistula—both of them successfully undertaken, may be thought to be of some interest and worthy of publication.

CASE 1.—A man aged twenty-seven years was admitted to St. Mary's Hospital on Oct. 21st, 1893, having been run over a few minutes before by the trap which he had been driving and from which he had been thrown. He believed that a wheel had passed over the lower part of his back, and here there was a decided linear bruise. He complained of pain below and to the outer side of the left anterior superior iliac spine, and at this place there were slight redness and swelling. There was no marked collapse, nor did he seem very ill, but it was thought right to keep him in the hospital and in bed. There were, so far, no evidences of internal injury, but the man was restless and uncomfortable; and on the 28th—that is, a week after his accident—his evening temperature rose for the first time to 100° F. Coincidentally with the fever he made greater complaint of pain in the left loin and ilio-inguinal region, and this steadily increased day by day. His temperature, moreover, rose to 101°. Presently there was a suspicion of fulness and increased resistance in the left flank, the part became tender, and on Nov. 11th—the temperature on the previous evening having been 102°—there was distinct fluctuation between the left great trochanter and the crest of the ilium. From this spot fæcal pus was evacuated by incision, and soon afterwards solid fæces came from the opening. Two days later it became necessary to make a second incision immediately internal to the anterior iliac spine, and from this also there was a copious fæcal discharge. The first wound below the iliac crest closed soon after the more internal and direct route had been established for the discharge. The character of the fæces pointed clearly to their escape from the large bowel, but it was impossible to say with certainty whether the perforation had been the immediate result of the injury or had followed the sloughing of a severe contusion. The history of the case rather inclined us to regard the second cause as the more probable. At any rate, the fæcal escape was altogether extra-peritoneal, and we determined to see what rest, drainage, and cleanliness might do towards closure of the fistula before hurriedly resorting to operation. Although from time to time it looked as if the hole were going to close, the hopes of it were blasted by renewed discharge, and on Jan. 20th, 1894, three months having passed since the accident, and the discharge of fæces being as great as ever, it was resolved to expose the gut, and, if the orifice were a small one, to endeavour to close it by infolding of the wall with lateral sutures. Free incisions were required in order to find the bowel. It was firmly bound by adhesions, but by carefully following the route of the fistula that part of the bowel which was perforated was found without disturbing the whole circumference of it. In this way the general peritoneal cavity was avoided. A longitudinal rent with jagged edges, three-quarters of an inch in length, was found at the lowermost end of the descending colon and, as far as could be judged in the confusion of adhesions, at that side of it which is commonly uncovered by the peritoneum. A sufficient length of bowel having been freed to make the manipulations easy, lateral Lembert sutures were inserted so as to infold the wall of the gut and hide the rent, in the hope that peritoneal adhesions might be formed