naturally enjoy a racial *immunity;* an old resident, also, one would suppose to be less prone to attack, or he would, perchance, not be an old resident in the tropics; but, should he get an attack, he will find he has not gained immunity from any succeeding attacks, but the reverse. Again, one attack predisposes to another, and does not give immunity, as is the case with infectious diseases.

Lastly, as regards this supposed *microbe.* It has not yet been seen. Cagicol and Lapierre, it is true, have described one, but their observations have not been confirmed. Stiles, of Edinburgh, injected blood from patients suffering from sunstroke into a healthy subject without causing any reaction, thus excluding the presence of any toxine. Owing to these considerations, I feel I must reject the microbic theory, as far as India is concerned.

As regards the sequelæ, I may mention in my own case the onset, for at least a year after the primary attack, of most distressing attacks of palpitation of the heart, with a feeling of impending dissolution. These I have not noticed as having been previously recorded.

EXCISION OF THE CÆCUM.

By D. Lowson, *Hull.*

Resection of various parts of the intestine and stomach has been followed by considerable success, more especially since the introduction of Senn's decalcified bone plates and Murphy's buttons, and also since the more perfect management of end-to-end stitching. Removal of the cæcum, however, is not a common operation, or at least few such have been published; but it has been my good fortune to have three cases of the sort pass through my hands, one of which was published ten years ago: two others have never been recorded in any of the medical prints, but one was read before one of our local Societies in Hull, but of the third, unfortunately, I can find no record.

Case 1.—My first case became an in-patient of the Hull Royal Infirmary in 1892. He had, before admission, on two occasions passed a large quantity of blood per rectum, at first bright red and copious, but gradually ending in smaller quantities of a dark tarry colour and consistence. On admission, he stated he had lost 7 or 8 lbs. in weight, yet on the whole he looked well, was muscular and well formed, but admitted he had led a "rackety" life, having associated much with low-class betting men, and having been also a frequenter of low public-houses and dram-shops. He had never suffered from any symptom of obstruction, nor were there any gastric or intestinal troubles besides the already mentioned hemorrhage. On the right side of the abdomen, level with the umbilicus, was both seen and felt a large mass the size of a cocoanut, hard in its consistence, easily movable laterally, not

tender to the touch, and with little spontaneous pain. The urine was healthy, and the liver was normally sized and easily separable from the tumour below. Dulness on percussion existed in and out over the greater part of the growth, but the intestine seemed to cross the lower end of it, ascending up from below and passing to the inner side of the mass. The absence of renal and hepatic symptoms and the existence of intestinal hemorrhage seemed to indicate the intestine as the seat of the disease, while the situation of the tumour itself pointed to some part of the ascending colon.

On opening the abdomen, the cæcum was seen to be unaffected, but a large hard mass involved the middle reaches of the right colon; the omentum was adherent to it anteriorly, and had dragged the transverse colon across the lower end of the tumour, and was evidently the cause of the tympanitic note heard on percussion in that situation. I will reserve the description of the operation, as it was in the main the same as in Case 2, except that, as the Murphy button had not been introduced at this date, Senn's lateral plates were used, three-fourths of the right colon being removed with the cæcum and 4 in. of small intestine, the end of colon and ileum being both closed by a double row of stitches, and the small intestine and transverse colon united laterally by Senn's plates. The patient suffered much from shock, but gradually rallied, made a good recovery, and he is living now and leading a life as unregenerate as ever. Less than six months after the operation he undertook to run a race with a younger opponent for £5, and carried off the prize. When last seen he had put on a large amount of flesh, and looked fat and rosy. By some oversight the tumour was thrown away, so that its nature was never ascertained microscopically. It was hard and nodular, and filled without occluding the bowel. At the time I had little doubt it was a malignant growth, but as it has not recurred all this time (ten years), one cannot help questioning the accuracy of this opinion.

Case 2.—R. W. S., a railway employee, æt. 40, had for ten years felt something wrong in his right iliac region, and for six or seven years observed a swelling there—small at first, but slowly and gradually increasing in size. The regular evacuation of his bowels had also been disturbed, and on many occasions he had suffered from severe attacks of intestinal colic. Apart from this, he had always enjoyed good health, and he had the outward appearance of a healthy man. On the third of June 1897 he called in his usual medical attendant on account of a recurrence of the abdominal pain, similar to what he had formerly so often experienced. He was found in bed lying on his back, with his legs drawn up, his face pale and pinched, his skin moist and cold, pulse small and weak, but temperature 102°. He was suffering from intense pain, which he referred to the swelling in the right iliac region. The growth on palpation was most distinct, and its situation seemed to the surgeon to correspond as nearly as possible with the normal seat of the cæcum, but ascending upwards some distance in the course of the colon, and ending a little above the level of the umbilicus. Constipation was absolute, and there was a slight degree of meteorism, no flatus passing, and, so far, he had not vomited.

Opiates were administered to relieve immediate symptoms, and he was restricted to small quantities of liquid food: ultimately the obstruction yielded, and several copious fluid evacuations relieved him for the time. He was kept under treatment for a fortnight, and although the anodynes were left off, no pain was felt during the rest of the time, and he was consequently allowed to go back to his work. In the beginning of the month of July he had another attack, with the same kind of symptoms—pain, constipation, and rather severe collapse. The swelling seemed to occupy the cæcal region as before, and was distinctly larger. It was found on this occasion that handling the swelling gave relief, and that, soon after, a large quantity of gas gurgled through and was emitted per anum, leaving the swelling much smaller, and now the same size as when seen in June. This time he remained under the doctor's care for ten days. I saw him for the first time on the 10th of July, and extracted the above history. In addition, I may add that the lungs and heart seemed healthy, the liver was of normal size, the urine was free from albumin and sugar, and there was neither blood nor slime in the evacuations. The swelling was well defined, firm in consistence, but by no means of a stony hardness, rather tender on handling, of the shape and size of a slightly enlarged kidney, with a notch on the inner side, and situated over the ileo-colic junction. It might easily have passed for a kidney, displaced downwards, and fixed by adhesions in an abnormal situation, for there was but little mobility in any direction. Several large enemata failed to reduce the size of the swelling, and therefore "impacted fæces" was excluded. The sickly sensation generally felt on pressing the kidney was not elicited, and, in addition, I thought I could feel the end of the kidney in the usual position, just peeping from below the ribs. On the whole, it seemed like some cæcal tumour, but its duration of ten years was against its malignancy. The great difficulty in reaching a diagnosis in such a case is illustrated in a paper by Dr. Rolleston and Marmaduke Sheild, read before the Clinical Society of London, where it is stated that the members of the staff of St. George's Hospital had great difficulty in diagnosing a similar case. "Various opinions were expressed regarding the nature of the tumour, most being in favour of its renal origin. Suggestions of malignant disease of the bowel, impacted fæces, and a wandering spleen, were also made." In any case, the frequency and severity of the attacks of pain and the danger of complete and persistent occlusion of the bowel, in addition to the lingering suspicion that in spite of the long history it might yet have some malignancy in it, made it clearly advisable to open the abdominal cavity, and see if by any means the growth could be got at and removed.

The patient having consulted his friends, and having given his full consent that I should do whatever I deemed best, he was at once placed on the table, and the operation carried out as follows:—A 5 in. incision was made through the abdominal wall. The muscles and aponeurosis were densely infiltrated over the most prominent part of the swelling, and, afraid lest I should open into a pus-containing cavity, and perhaps defile the peritoneum, I opened the serous membrane at the very uppermost end of the incision and introduced the finger. It was then clear that the mass was adherent to the anterior parietes over a considerable

area, but as there was no sign of pus, I quickly separated the adhesions and completed the line of incision. The tumour was now seen to occupy the right iliac fossa, and, a long adhesion still remaining unsevered on the inner side of the incision, which was evidently old and non-vascular, I snipped it through without ligature. The omentum had also to be separated by scissors and ligature. The whole growth now lay fully exposed, the size of a small cocoanut, of dense fibrous consistence, the ileum entering the mass on the inner side, and the colon issuing from it above. In order to separate the mass I opened the peritoneum, covering the posterior abdominal wall, on the outer side of the colon, and slit it up as far as the kidney and again across below the cæcum. The latter, with the ascending colon, was now pulled off its bed and turned inwards, that is, to the left. The serous layer on the back of the abdomen on the inner side of the colon was next tied off and separated by scissors from the colon down to the entering ileum, and the latter was in the same way separated from its mesentery for 3 in. The tumour was finally peeled off the iliac fossa, and one or two small vessels secured. We had now a free loop consisting of a small bit of ileum together with the tumour (in which was the cæcum), and, in addition to this, a short piece of colon above the tumour, about 2 in. This loop was now drawn out of the abdomen and slung free over the loin. The clamps were next applied, one round the uppermost part of the freed colon and the other round the ileum. Colon and ileum were now divided, and the tumour thus completely detached was thrown aside. Both cut ends were carefully washed and disinfected. The open end of the colon was completely closed by a double row of stitches, the outer being discontinuous Lembert's, while half a Murphy button was placed in the open end of the ileum and retained by a purse-string ligature. A straight incision was then made on the anterior aspect of the colon, a little above the closed end, and into this the other half of the Murphy was inserted and similarly retained. The two half Murphys were now brought together, placed face to face, and pushed home. The hole in the mesentery was finally closed, and the whole carefully washed and the abdominal wound entirely stitched up. There was nothing remarkable in the convalescence. The button was passed on the 29th day.

Though some surgeons have raised objections to the button, for various reasons, I do not think any better plan exists when it is desired to implant the end of the ileum on the colon. The natural forces of the small gut forces the button in the way we desire it to go. If care is taken to clean the bowel out before the operation, the contents are too liquid to cause a block; kinking is unlikely in this situation; and even if rotation and a block takes place, one has only to wait a little and the button will be forced into the great bowel, after which there is no danger of any further obstruction. In the paper already referred to, Mr. Sheild stitched the small gut and the colon end to end, and the consequence was that, where the straight line of sutures joined the circle of sutures round the end of the ileum, there was a corner, and consequently a weak point. He was saved by having introduced a carefully placed gauze drain. "On the twelfth day," he

tells us, "the discharge, which had hitherto been serous, became distinctly feculent," though no harm resulted. With the Murphy, however, in my case, introduced at some distance from the line of sutures closing the colon, I was not afraid to close the abdominal wound completely, leaving no drainage of any kind. In lateral anastomosis a double row of stitches is probably the best. It seems almost a "toss-up" in such cases whether the metal button passes the right way into the next coil or is driven into the blocked intestine, where it lodges until the patient dies or until a second operation is undertaken for its removal. In end-to-end union of great intestine it is absolute madness to use the button. The danger of blockage by fæcal masses is too great a risk to be run; and the same remark applies to lateral union between different parts of the colon. In using Murphy button for end-to-end union in the case of small gut to small gut, there is also considerable danger, as the intestine gets gradually smaller towards the ileum, and if there has been any obstruction before the operation, the gut below has been getting narrower and narrower for some time before, on account of being more or less empty of contents, and obstruction is all the more likely to occur, before the button forces its way into the colon. I had one example of this in the case of a gall stone, certainly not larger than a medium-sized button. It was arrested 2 ft. above the valve, and throughout these 2 ft. the bowel was not larger, I think, than a goose-quill. I should therefore be afraid of introducing the Murphy button where there has been several days' obstruction and the bowel contracted below the point of obstruction.

The growth itself was examined by the Clinical Research Society, who reported it to be a non-malignant lymphoma.

PSORIASIS: A CLINICAL RECORD.

By CHALMERS WATSON, M.B., F.R.C.P.Ed., *Edinburgh.*

(PLATE XIII.)

IN the *British Medical Journal* of March 22, 1902, the writer published a preliminary communication on the treatment of deafness of middle ear origin, the basis of the treatment being the use of a preparation of bone marrow. It was there pointed out that the use of this preparation in cases of chronic non-suppurative middle ear disease was a particular application of a general theory regarding the function of the bone marrow. In broad outline this theory is, that the bone marrow produces an internal secretion of vital importance in the economy; that this substance is prophylactic against the injurious action of various bacteria which in health exist as saprophytes in different tissues; and that its defective production is liable to be followed by pathogenic action