

Conclusion.

The spray pumps shown in the photographs have been made by Messrs. Benton and Stone, brassfounders, Bracebridge Street, Birmingham, who have carried out in a practical model all the suggestions I made to them for the adaptation of their garden sprays to the purposes of wet disinfection. In the *Sanitary Journal* for March, 1897, and in *Public Health* for March and May, 1900, I discussed in considerable detail the method of disinfection by spray. The pump now described will, I think, fulfil all that can be legitimately claimed for spray disinfection, and I say so in the light of five years' experience of the method in the ordinary routine work of a medical officer of health. There are, no doubt, many varieties of spray producer in the market, and experience will continue to suggest improvements. All I claim for the spray pump described is that it is light, easily worked, and cheap.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

CASE OF STRANGULATED PERINEAL HERNIA.

B. S., aged 44, a native officer of Sikh cavalry, a very tall, stout heavy man, and a noted rider and cyclist, returned quite well to his headquarters (Deoli) on October 16th, 1897, having completed a ride of 109 miles on horseback.

On October 19th he noticed a hard, tender lump the size of a horse bean to the right of the centre of the perineum, and on October 26th he took to his bed and treated the swelling with fomentations.

On October 30th, when I saw him, the whole of the right ischio-rectal fossa was swollen and hard, the swelling implicating the cellular tissue of the perineum generally, and extending to the right buttock. On the same day an incision was made by the right side of the anus. Some dirty thin pus, together with liquid fæces, escaped from the wound, whilst a quantity of black, necrosed, stinking omentum prolapsed. Rectal examination revealed nothing wrong with the lower gut itself, but a hard mass was felt in the pelvis to the right. There was no abdominal swelling, pain, or tenderness. The bowels had been moved regularly every day, and there had been no symptoms indicating strangulation. The temperature was 100.6°, and the pulse 100.

On November 3rd the tongue was brown and furred, and the breath foul. The bowels continued to be opened naturally, though a little liquid fæces still escaped from the wound, indicating leakage from the intestine. The gangrenous omentum was removed with scissors. The parts were cleaner, but still emitted a horrible smell. The temperature was 101°, the pulse 100 and feeble. There was slight delirium at night. Brandy was administered at intervals.

On November 5th more necrosed omentum was removed from the wound, from which, after November 7th, no more liquid fæces escaped. The parts then gradually cleaned. Two deep sinuses remained, one passing backward and upwards between the rectum and the bulb on the right side, the other passing upward for 3 inches behind the rectum. The skin was also undermined for 3 inches forwards in the direction of the symphysis, and this part being laid open on November 27th soon filled up and healed over. The deep sinuses were reserved to be dealt with later, but the patient refused further operative treatment, and went off on leave to his home in the Punjab. I now (March, 1901) hear that he has since continued regularly to perform his duties, riding at the head of his troop, though he has still a small sinus (or fistula) behind the rectum, which he says gives him little inconvenience, and for which he declines any further surgical treatment.

Udaipur.

H. R. WOOLBERT, M.B., F.R.C.S.

THE STAINING OF THE TUBERCLE BACILLUS.

WITH reference to the note by Dr. Macleod in the *BRITISH MEDICAL JOURNAL* of July 6th, 1901, I should like to point

out that the method may be still further shortened by not using a coverglass at all.

So soon as the film has been stained in the ordinary method with the carbol-fuchsin and methylene blue and dried, a drop of cedar-wood oil or castor oil can be put on to the specimen without the intervention of the coverglass and examined with a $\frac{1}{2}$ -inch power, giving quite as good results, to say nothing of the time and expense saved. Personally I have used this method for two years.

E. MELLO SAUNDERS, M.R.C.S., L.R.C.P.
King's College Hospital.

FOREIGN BODY IN THE LEFT NASAL DUCT.

ON June 20th, 1901, a Singalese woman, aged 50, consulted me for a left fistula lachrymalis of fifteen years duration.

I slit the canaliculus and attempted to pass a probe down the nasal duct, but failed. I then thrust a knife down the duct, and kept the stricture open by daily probing until June 26th, when I introduced a style of lead.

On June 28th she again came up to see me as the pain and discharge continued, and the swelling had increased in size. I removed the style, and saw protruding through the canaliculus a fine thread, which looked like a shred of tissue. This I seized with a forceps, and to my surprise pulled out a roll of cloth $\frac{3}{8}$ in. in circumference, $1\frac{1}{2}$ in. long, and $\frac{3}{8}$ in. wide. On questioning my patient about this piece of rag, she said she had no knowledge of its existence there, but said that she had consulted a Bengalese "doctor" a year ago, who opened a swelling in the position of the present fistula, and he might have introduced the rag. No doubt her explanation is correct.

Recovery rapidly took place after this, and on July 1st, the last time I saw her, the fistula had healed and the passage down the nasal duct was free.

A. J. McCLOSKEY, M.B., C.M. Edin.
Selangor, Federated Malay States. District Surgeon.

REPORTS

ON

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF THE BRITISH EMPIRE.

HORTON INFIRMARY, BANBURY.

SPONTANEOUS CURE OF AN UNUSUALLY LARGE INTUSSUSCEPTION.

(Under the care of A. H. BOISSIER, L.R.C.P.)

MRS. R., aged 23 years, was admitted on February 20th, 1901, in a state of semi-collapse, having been sent from a village some seven miles distant.

History.—She stated that a month earlier she had suddenly been seized with severe pain over the abdomen generally. She did not remember vomiting at the outset of the pain, but the next day vomited several times a green, slimy, material, but no food or fæcal matter. Attacks of pain and vomiting, each lasting ten minutes or a quarter of an hour, occurred several times daily during the month. She had passed motions nearly every day during the month, but was not clear as to the passage of blood on any occasion. She had been able to take light nourishment during the whole time.

On the morning of admission she had the worst and longest attack of pain, but it immediately ceased on the protrusion of a mass from the anus while straining at stool. She had been married two years, had had one child and no miscarriages. Four or five years earlier she had had an attack lasting three weeks of "gastric" fever for which she was treated in a hospital.

Condition on Admission.—She was quite conscious and free from acute pain. The pulse was feeble and thready; the tongue coated, but moist; the lips dry and cracked. The abdomen showed no marked distension, but was somewhat tympanitic generally. In the left ilio-lumbar region was a hard mass slightly longer than a kidney, immovable, painful on pressure, and dull on percussion. The uterus was enlarged and easily felt, suggesting a pregnancy of about three months (amenorrhœa had existed for some weeks, but no definite period could be given). Protruding from the anus was a twisted membranous-looking mass, thickly coated with fæcal matter, which on gentle traction was seen to be continuous with a flat membranous cord suggesting collapsed intestine; further traction on this flat cord brought it away free from the anal orifice without pain. The rectum was digitally explored and found to be full of soft fæcal matter. The uterus could also be felt enlarged and hard. Subsequent vaginal examination confirmed the impression of pregnancy.

Progress of Case.—The patient was kept quiet in bed, placed on a milk diet, and enemata administered daily for the following fortnight, by which means the bowels were freely relieved. For three weeks vomiting occurred at intervals of a few days, accompanied by severe pain in the back and loin, corresponding mainly to the position of the tumour noticed in the left ilio-lumbar region; morphine injections relieved these attacks quickly. The patient gradually during this time got back to solid food, and gained strength, and was allowed up in the ward after the first fortnight. On March 15th, the twenty-third day after admission, a slight "show" appeared from the vagina, accompanied by intermittent pain. The following day more hæmorrhagic discharge took place, with increase of pain, terminating at 9 P.M., on March 16th, in a miscarriage of a fetus of about three to four months growth. The placenta required detachment and removal. The patient made a normal recovery from this complication. She continued to have occasional attacks of pain and vomiting, which yielded to morphine as before, up to the date of her discharge from the hospital, which took place, at her own wish and against all advice, on April 1st.

Description of Specimen.—The mass extruded from the anus was found to consist of $4\frac{1}{2}$ feet of small intestine, with a corresponding amount of mesentery. At one end there was a distinct polypus attached to the mucous membrane, which suggested the probable starting point of the intussusception.

REMARKS.—The spontaneous cure of an intussusception is of sufficient rarity to warrant the publication of the above case. Its successful termination is rendered more than ordinarily interesting by the extraordinary length of the portion of bowel passed. The symptoms seem to have followed the course given by authorities, but all are agreed as to the extreme rarity of the occurrence. It is difficult to realise how the lumen of the bowel could remain patent under these conditions, but that it did so in this case is shown by the record of the month's symptoms previous to admission. The abortion was an unfortunate and grave complication, but happily only somewhat retarded the convalescence from the intestinal lesion. Under these circumstances, therefore, the patient may be heartily congratulated on her fortunate recovery from an extremely rare and dangerous condition. Whether a like successful result would have been obtained had the state of affairs been more apparent from the first and means adopted for the reduction or resection of the mass forming the intussusception may be a doubtful point to some minds; but, happily for the patient, must ever remain a matter of opinion only. I am indebted for most of the above notes to Mr. W. A. Cox, House-Surgeon, and also for his skilful care and attention to the patient during the time she was in hospital.

REVIEWS.

HYGIENE AND PUBLIC HEALTH.

In the *Theory and Practice of Military Hygiene*,¹ by Captain MUNSON we have a volume which may be said to be one of the results of the recent Spanish-American war, inasmuch as many of the lessons learned by bitter experiences in camp and cantonments by the armies of the United States have suggested to the author the need of a textbook dealing directly with the sanitary problems peculiar to military service. To the English reader since the first appearance of the classic work of Edmund Parkes, more than thirty years ago, many of the points discussed are familiar, but the tendency of the successors of Parkes has been to elaborate works on general hygiene containing much material which, while not without some applicability to the military service, has tended to leave imperfectly noticed a large number of subjects, a knowledge of which is of the highest importance to the military sanitarian. We therefore cordially welcome Captain Munson's effort to supply these deficiencies. His first two chapters are devoted to a consideration of the many important points connected with the selection and development of recruits. This subject is naturally regarded mainly from the American standpoint, but not unduly so, and we have read these pages and those which follow on the hygiene of marching with pleasure and profit. The succeeding sections dealing with water are not up to the same high level. The problems connected with quantity, sources, storage, and supply are commendably considered, but the explanations relating to the examination of water are disappointing, more especially the bacteriological examination, which is dismissed in three

¹ *The Theory and Practice of Military Hygiene.* By Captain E. L. Munson, Medical Department United States Army. London: Baillière, Tindall, and Cox, 1901 (Royal 8vo, pp. 948, 8 plates and 400 engravings, 32s.).

pages. The difficulties attending the purification of water under conditions of military life are clearly explained, and we notice that the Waterhouse-Forbes steriliser is well spoken of. This apparatus was favourably reported on at Netley, but we doubt whether our War Office ever gave it a fair trial in the field. We agree with the author when he says that both the Berkeley and Chamberland filters, if given proper care, serve an excellent purpose in fixed camps or garrisons, but the difficulties attending their liability to clog and systematic periodic sterilisation are such as to render them often a trouble rather than an advantage in the field. The discussion of sterilisation of water by chemical means is unsatisfactory, for we hoped to find that the American army had given these methods an extended trial. The soldier's ration is admirably discussed, and, taken in conjunction with the author's views on tropical dietaries on p. 869 *et seq.* in the chapter on the hygiene of hot and cold climates, is a valuable contribution to the literature of military subsistence. Speaking of the British ration on p. 183, the statement that a grocery ration is provided by a stoppage from the soldier's pay of about $3\frac{1}{2}$ d. daily is not quite accurate. This messing allowance of $3\frac{1}{2}$ d. daily is really in addition to and quite independent of the soldier's actual pay. The difficulties as to emergency rations is well discussed. The various chapters dealing with clothing, accoutrements, barracks, hospitals, sites, camps, and the sanitary administration of camps are thoroughly sound and comprehensive. The management of garbage, refuse, and excreta in camps has evidently been as much a sanitary bugbear with American troops as with our own. We have no experience of either the Bissell incinerator or the Cowley or the Smith camp crematories, but the descriptions given of each are such as to suggest the need of our own War Office giving them a practical trial. The associated subject of sewage disposal in cantonments is thoroughly well treated. The same also must be said of the chapters dealing with military mortality, diseases of soldiers, disinfection, and the habits of the soldier as affecting efficiency. In all, the attention is focussed upon essential facts and features of military life, rendering the chapters remarkably free from diffuse generalities. The whole book is eminently readable and curiously free from attempts to explain the science of the subjects by means of elaborate formulæ. It will not take, nor is it intended to take, the place of works on general hygiene and public health. Dealing exclusively with the hygiene of the soldier, it constitutes a valuable and specialised addition to the already large number of books on sanitation. Though primarily addressed to the American army medical officer, it is written in so catholic a spirit that we commend it to the study of our own military brethren. The great defect of the work is its size; possibly the author may be able to remedy this in future editions.

The *Handbook of Public Health Laboratory Work and Food Inspection*, by Staff Surgeon ANDREWS,² consists of the lectures delivered by him to the surgeons under instruction at the Royal Naval Hospital, Haslar. The subject matter is grouped into three parts. Part I gives in about 60 pages a considerable amount of useful information upon the many points to be observed in the inspection of fish, flesh, and fowl intended for human food. Part II deals with the more important matters relating to the examination of water, air, milk, various food stuffs, wine, etc. The separate indices to Parts I and II are placed at the end of their respective parts, in the body of the volume; this arrangement does not improve the appearance of the book, and it is certainly not more convenient than a general index at the end would be. Part III embraces the main facts connected with the subject of meteorology. The influence of the various atmospheric phenomena on health and disease is discussed. Information on climatology is given which will prove of special value to medical officers of both services. It may be said that this part is, on the whole, the best in the book. It is rare that exception can be taken to the correctness of any of the author's statements, and the one or two instances noted are confined to the subject of water analysis. The method advised for testing for calcium salts will include magnesium if

² *Handbook of Public Health Laboratory Work and Food Inspection.* By O. W. Andrews, M.B., B.S., M.R.C.S., D.P.H., Staff Surgeon Royal Navy, late Assistant Instructor to Surgeons on entering Royal Navy. London: Baillière, Tindall and Cox, 1901. (Demy 8vo, pp. 292. 7s. 6d.)