was a bulla one inch in length, three-quarters in breadth, with an irregular outline and a dark-coloured base. For an inch and a half surrounding this, the tissues were hard. The skin was inflamed upwards to near the shoulder, downwards to near the wrist, and extending two-thirds round the arm. He did not complain of feeling ill. Pulse 68. He slept well, took his food as usual, and walked out about home. Two days afterwards—that is, on the ninth day—the bulla had gone, and a black eschar remained; but surrounding this was a rim of small vesicles, which disappeared in a day or two. The inflammation rapidly subsided, and the eschar separated. When convalescent, his pulse was 68—the same as when the arm was most inflamed. Fluid taken from the bulla on the seventh day contained a few bacilli. Tubes were sent to Professor Greenfield, who reported that “inoculation with the clear serum produced anthrax in a guinea-pig, which died fifty-four hours after inoculation”. Blood taken from the indurated tissue immediately surrounding the eschar did not appear to contain any bacilli, and immediate inoculation with it failed to produce any effect.

CASE II. External Anthrax with Severe Constitutional Symptoms.—W. E., aged 15, was employed about a mill where mohair was used, which had recently been fatal to several sorters. On June 23rd, 1880, during dinner-hour, he went into the sorters' room to see his brother, and, feeling tired, lay on some Van mohair. Two days afterwards, he experienced a slight tickling sensation on the left temple; and on the seventh day a small pimple appeared. The eyelids, side of the face, and neck were much swollen. He went to work, but could not continue it. On the ninth day, he was very ill, and Dr. Logan of Bingley was sent for. He had then a vesicle of the size of a sixpence, with dark base, on the left temple, one inch from the external canthus; much swelling of eyelids, parotid and submaxillary glands. Pulse 130, with delirium. In a few days, the severe symptoms declined; the swelling gradually subsided, and the eschar separated. This local form of anthrax in woolsorters and others who come into contact with hairs and wools is rare; but fatal cases have recently occurred. The more common form of “woolsorters' disease” has no local manifestation; but, as it is produced by the same material as anthrax, I have called it anthracæmia. When the poison is introduced through the lungs, it produces pulmonary anthracæmia; when through the alimentary canal, it produces enteric anthracæmia.

CASE III.—J. G., aged 49, a mohair-sorter, on July 17th got wet, and thought he had taken cold, as during the following few days he felt sickly, and his bones ached. On July 22nd, he left work about noon; went home to bed; said he ached all over. He had no sharp pain, but had slight cough, some expectoration, oppression at the chest, and did not sleep much. The following morning, he sent for his doctor, who visited him at ten o'clock. He was perspiring freely; pulse small, rapid, and intermitting; hands cold; mind clear. He died about noon, twenty-four hours after leaving work. A *post mortem* examination of the body was made by Mr. Spear, the Medical Inspector of the Local Government Board. Bacilli were found in the blood and other fluids.

CASE IV.—S. F., aged 33, a mohair-sorter for the same firm as the man whose case I have just given, on July 25th, 1880, complained of being unwell, and said he had an aching pain across his chest. On the second day, he was easier, but had a slight cough. On the third day, he was seen by several doctors, some of whom thought he had a little pneumonia, but certainly not “woolsorters' disease”. Pulse 130; respirations 24; temperature 101.6°. Lungs fairly resonant; right somewhat duller than left; vesicular sounds subdued and distant; no bronchial or moist sounds. He died twelve hours afterwards. A *post mortem* examination of the body was made twenty-nine hours after death. The external discolorations peculiar to blood-poisoning were present. The right side of the chest contained four pints of clear, pale, straw-coloured serum. The posterior part and base of the right lung were inflamed; the bronchial glands on the right side much enlarged and soft, containing fluid of a dirty colour. The mucous membrane of the trachea was of a dark claret colour. The pericardium contained six ounces of fluid. The valves of the heart and the lining of the large vessels were stained of a bright cherry-red colour. There were no decided subserous blood-spots, but some ecchymoses. The spleen was somewhat larger and softer than natural; other viscera normal. Blood taken from the finger twelve hours before death did not appear to contain any bacilli. None were found in serum removed from the chest by hypodermic syringe twelve hours after death. Fluids removed at the *post mortem* examination were found to contain very numerous non-motile bacilli.

I must now conclude with a word or two on anthracæmia from mohair in heifers and sheep.

At a village in the neighbourhood of Bradford, where several sorters have lately died from woolsorters' disease, the hot water or sud after washing the mohair is run into tanks and neutralised by sulphuric acid,

to extract the grease. The water then passes into the common drain of the village, and is utilised to irrigate some fields near.

During the second week of May last, five healthy heifers (of a herd of twelve), which had been in adjoining fields for the previous three months, were turned into the sewage pastures. In about three weeks, one of them died after a few hours' illness; and three others were ill, but recovered. The sewage was suspected; four other heifers were added, and they were allowed on the sewage fields twelve hours daily. On June 29th, the remaining heifer of the first lot which had not been ill died suddenly, after a short illness. They were then all removed from these pastures; and on July 4th, six days after removal, a third, which had not been previously ill, died similarly. During the same period, several sheep were found dead in the fields.

Post mortem examinations were made of several of the carcasses of the heifers and sheep. The blood and fluids were found to swarm with the bacillus anthracis, the spores of which are supposed to have been derived from the mohair, and conveyed with the sewage to the land. They then gain access to the alimentary canal with the food and drink, and develop what I have called enteric anthracæmia, because the pathological changes are mostly found in the intestines and spleen.

CASE OF IMPERFORATE RECTUM, WITH A SUGGESTION FOR A NEW METHOD OF TREATMENT.

By NEIL MACLEOD, M.B. Edin., Shanghai.

A FEMALE child was born May 26th, 1879, apparently well developed, of rather a deeper pink colour than usual, and weighing $5\frac{3}{4}$ lbs. On the following day, the bowels not having moved, a probe was passed into the anus, which was found to communicate with a *cul-de-sac* about half an inch in depth. The probe was then passed into the vagina for nearly two inches; it could be moved about with freedom, and felt readily from the anal *cul-de-sac*, where the rectum should have been. There was no bulging in the perineum. The child had passed urine of natural colour several times since birth, and did so during the examination, when also a thick, white, mucus-like material was seen to issue from the vagina, the orifice of which was large enough to admit the tip of the finger, and surrounded by a thick fringe of mucous membrane, which was all that was present for a hymen; the bony outlet of the pelvis seemed natural. The abdomen was slightly distended, and perhaps more so in the left iliac region than elsewhere, and there was no tenderness. The child had vomited two or three times, the nurse said, a clear stuff like mucus, and cried but little. Dr. Little saw the case in consultation, and agreed with me as to the advisability of operating at once. With his assistance, therefore (on the afternoon of the same day), the child having passed urine during the examination made immediately before operation, I made perineal exploration for the rectum, cutting carefully in the middle line to a depth of an inch and a quarter without being able to feel with the finger anything like a bulging loaded bowel. The wound bled freely; a plug of carbolised lint was inserted in it, when the oozing ceased. I then performed Littre's operation, with complete antiseptic precautions. Two vessels in the abdominal wall bled freely, and were tied with catgut. When the peritoneum was opened, about half a drachm of clear serum escaped, and a piece of bowel presented itself, healthy, distended, fluctuating, and crossed transversely by several large vessels. Careful exploration was then made with the finger, which passed down as far as the pelvic brim along the bowel, and round what appeared to be the end of it, forming a *cul-de-sac*, from the corner of which, near the middle line, a thin cord-like body dipped into the pelvis behind and fore from the uterus. Sutures were then passed through skin and gut, one on each side forming a loop, with a bite of fully half an inch of both skin and bowel, and there being held tight. On opening the bowel between, meconium could not find its way into the peritoneal cavity. The sutures were then fished out of the bowel with a blunt hook, cut, tied, and a few more applied. A large quantity of fluid meconium escaped. Carbolised sponges, gauze, etc., were applied to the wound. Though the child had lost a quantity of blood during the operation, and evaporation from the spray had cooled the surface considerably, it presented a natural pink hue. The child was then wrapped in cotton-wadding, the nurse being ordered to keep it very still, and to give it by spoon milk supplied by a wet-nurse. Four hours afterwards, I found the child blanched and pulseless, bleeding having taken place from the abdominal wound, the nurse meanwhile carrying and swaying the child in the arms. On removing the dressing, the bleeding, which had taken place from the wound in the groin, had ceased, and the abdomen was flattened considerably by the escape of a large quantity of meconium. The child

had taken several spoonfuls of milk, and had not vomited. Death took place nine hours after the operation, early the following morning, more meconium having escaped, but no further hæmorrhage.

Necropsy, fifteen hours after death, permission having been obtained with difficulty to examine only the abdomen.—The wound in the groin looked healthy; the peritoneal cavity was perfectly free from any trace of inflammation, blood, or meconium. The perineal wound did not communicate with the peritoneal cavity. The rectum was completely imperforate, being represented by a slender impervious fibrous cord running down from the descending colon, almost in the middle line, into the pelvis behind the uterus, and attaching itself to the posterior wall of the vagina opposite the os uteri. It could be traced for three-quarters of an inch along the posterior vaginal wall, where it spread out and became lost thereon. The descending colon ended in a *cul-de-sac* at the pelvic brim, greatly distended, being about three times the diameter of the colon three or four inches higher up. The vagina was long and roomy, and had very thick walls. The cervical portion of the uterus had a diameter twice that of the fundus uteri. The bony pelvis was normal.

REMARKS.—I performed the ano-perineal operation in this case with but little hope of finding the rectum, from the absence of bulging in the perinæum and the very roomy vagina, which extended far backwards and upwards. When the child cried, the perinæum scarcely bulged at all.

The objections to Littré's method of operation are these: hæmorrhage, opening the bowel in the wound leading to the risk of escape of meconium and blood into the peritoneal cavity, and the very grave one, if the patient live, of having an artificial anus in the groin. Probably, there are but few parents who would be anxious that a child should live to experience the discomfort of such a condition. I would, therefore, suggest the following method of procedure, which seems to me likely to lead to more satisfactory results. Having performed the ano-perineal operation, and failed to find the bowel from below, make an incision in the abdominal wall of convenient length between the umbilicus and pubes in the middle line (or a little to the left of it to avoid the urachus and hypogastric artery). Next introduce the forefinger of the left hand into the abdominal cavity, examine the descending colon and rectum to discover the seat and relations of the upper *cul-de-sac*, then pass the same finger down into the pelvis in the middle line (behind the uterus in the female, the bladder in the male), and pressing the tip of the finger against, push outwards the floor of the pelvis, cut upon the tip of the finger as a guide, thus opening into the peritoneal cavity from below. Next introduce the right forefinger through the perinæum, and, guided and assisted by the left, hook the right finger round the gut, and pull it downwards and out through the perineal incision. Stitch the opening in the abdominal wall, then open the gut and stitch its edges to the edges of the perineal wound in the manner before described. Should the difficulty arise from mesenteric relations, of bringing the bowel down from the pelvic brim (only in the worst cases) to the perinæum, the mesentery could be torn or cut through and vessels tied. Whatever the nature or degree of malformation, the rectum on the right side, partially or completely imperforate, opening into uterus, vagina, bladder, or urethra, by the means I suggest (failing the ano-perineal operation) the condition could be more perfectly ascertained and more perfectly dealt with, and even in some cases there would be no necessity for opening the peritoneal cavity from below.

The whole operation should be done with complete antiseptic precautions, thereby lessening greatly the result of interfering with the peritoneum. The hæmorrhage would be less than in Littré's operation. The bowel would be opened practically outside the body, and the risk of escape of meconium, etc., into the peritoneal cavity done away with; while the after result as to the position of the artificial anus would be certainly better. On the other hand, there would be more handling of the peritoneum and an opening from below; but with the help of antiseptics, the additional risk might, I think, be more than counterbalanced by the advantages.

Extensive peritonitic adhesions would be a bar to the operation, but these are not likely to be met with if the condition be recognised and treated early, as in the case just recorded. Little hope of success can be entertained with any operation when peritonitis has set in. Should such another case come before me for treatment, I shall certainly give the above method a trial.

BEQUESTS.—Legacies have been left by the late Mrs. Susan Gorely of Dover to the following medical charities:—To the Margate Sea-Bathing Infirmary, £5,000; the Dover Hospital, £1,000; the Hospital for Diseases of the Throat, Golden Square, £500; the Kent County Ophthalmic Hospital, £1,000; King's College Hospital, £5,000; the Kent and Canterbury Hospital, £2,000.

CLINICAL MEMORANDA.

AN EXTENSIVE CARBUNCLE.

ON August 18th, 1880, I was called in to see John J., aged 53, a man of sanguineous temperament and plethoric constitution, who was foreman in a sailcloth factory; and, on questioning him, he informed me that, for the previous five or six weeks, he had been suffering from a succession of boils on various parts of the body; but that, until within the last day or two, he had felt pretty well, and therefore had not sought any medical advice.

He had now lost his appetite, and felt altogether out of health; and the pain he had suffered had, to a considerable degree, broken his rest. On examining what he called his "big boil", I found a carbuncle on the nape of the neck, measuring about two inches in diameter, which had already given way at several points, with the usual ash-grey sloughs appearing, and a fair amount of unhealthy discharge issuing from it. As it did not appear to be tense, and the pain had somewhat lessened, I did not adopt the incision treatment, but ordered poultices of linseed-meal and yeast, to be constantly changed. The bowels being confined, and the liver inactive, I prescribed podophyllin and rhubarb pills, to be taken when necessary, and a mixture of rhubarb and nitro-muriatic acid three times daily.

I could discover no symptoms of kidney-disease, and his urine was free from albumen and sugar. He appeared to improve in health, meanwhile the carbuncle still extending, until August 30th, when he began to exhibit signs of exhaustion, and his nights were restless, and the pain considerably increased.

I now prescribed a mixture, each dose containing quinae sulph. gr. iij; liq. strych. ℥ iv; and tinct. opii ℥ v, to be taken every four hours, and a quarter-grain pill of morphia at night; at the same time keeping up his strength with nourishment suited to his case. The carbuncle, however, still extended; and, on September 10th, it reached from ear to ear, and measured nine inches from the occipital protuberance downwards, extending to about the third dorsal vertebra. His mixture was changed to cinchona and ammonia every three hours, with the morphia at night, besides which I ordered him a teaspoonful of brandy, with liquid nourishment every hour. But from the latter date (September 10th), he gradually sank.

The healthy parts of the wound were dressed with unguentum resinæ, the sloughs being poulticed as before, and were well washed with carbolic acid lotion as each poultice was removed. The local treatment was somewhat serviceable, as the wound healed rapidly at its upper part, but extended at the same time on each side of the neck, until, on September 18th, it was completely encircled; and the walls of the chest were also attacked, causing severe pulmonary congestion.

The nourishment, stimulant, and medicine were continued, but the patient grew weaker until his decease, which occurred on the night of September 21st.

In conclusion, I should be glad to know if any of the readers of the JOURNAL have met with a similar case in which the disease made so extensive a progress.

WILLIAM HENRY WALTER,
South Petherton, Somerset.

FÆTID SWEATING OF THE FEET (BROMO-IDROSIS).

I AM pleased to see that Dr. George Thin has called attention to a very common affection of the skin of the feet, associated with horribly fetid perspiration. He rightly lays stress on the great importance of the subject; and I have no doubt most medical men are able to endorse all he says in his article in the JOURNAL for September 18th, 1880, with reference to domestic servants, who often find it impossible, on account of this loathsome affection, to follow their calling.

I have been for some years specially interested in the treatment of this diseased condition, and wish to make a few remarks on the subject.

The disease begins as a small, irregular-shaped patch, usually situated at the back part of the sole of the heel, and is generally symmetrical, though one foot is sometimes affected rather before the other. The patch has a well-defined margin, is of a pinkish colour, pours out sweat profusely, and, during the day, has a sodden appearance, but in the morning, on first rising, is bright red, dry, and shiny. In a short time, the whole of the skin of the sole may be affected, including the plantar surface of the toes; and, in aggravated cases, there is usually superadded some amount of eczema. The affected parts are, from the very first appearance of the disease, tender; and, after a time, the tenderness is so great, that all walking or standing is painful. The complaint usually occurs in adolescents, and I have seldom seen it after the age of twenty-five. I think it occurs with equal frequency in both sexes.