breath; the pulse fell; the temperature of the extremities was diminished; and his mind wandered.

On the evening of the 6th, there was no improvement in any respect; and he appeared fast approaching the moribund state.

On the morning of the 7th, I called as I supposed for the last time. Finding my colleague and one of the patient's sons with unusually cheerful faces, and enquiring the reason, I was requested to go up-stairs and satisfy myself. There, to my great astonishment, I saw that the patient had during the night passed an ordinary chamber-vessel nearly full of urine, somewhat tinged with blood; and I soon found, that instead of the subdued and placid manner exhibited during the whole time of the suppression, his natural irritability of temper had returned; for upon congratulating him upon so great a change for the best, he sharply and pettishly exclaimed,—“Better, Sir, Better! how can that be possible, when it must be evident that I am sinking into the grave every moment!”

In this, however, he was mistaken, as the kidneys continued to act, the vomiting subsided, the bowels resumed their functions, and under the care and attention of Mr. Keele, he gradually recovered as good a state of health as so formidable a malady at his advanced age could allow us to expect.

He still occasionally suffers from dysuria; but there has been no return of the ischuria renalis, although it is probable the latter might again take place.

I shall not go into the question of the proximate cause of the renal obstruction, as such an enquiry would be merely hypothetical and inconclusive; neither shall I allude to the treatment as having been successful, as the removal of the suppression cannot fairly be attributed to any of the means employed. I have stated the case (very briefly) to shew that we are not always to despair of recovery where the suppression of the urinary secretion is total, and where the cerebral functions might be exposed to the full action of an excrementitious poison during seven days. If the suppression had not been complete,—even if a few ounces of urine had been secreted in the seven days, I should not have deemed the case worthy of being recorded. Doubtless many of my professional brethren could adduce instances of urinary suppression, and perhaps with the like result; nevertheless, I believe such instances to be of uncommon occurrence.

It is singular that under circumstances so favourable to its production there should have been no comatose condition of the brain, for, although the mind occasionally wandered on the sixth and seventh day of the ischuria, there certainly was no coma; it is, however, probable, that the subdued and composed state of the nervous system was the incipient sedative effect of the urinous poison circulating in the blood, and that, had it been longer retained, a fatal coma would have been the result. This opinion is strengthened by the fact, that with the restoration of the renal function, the composed state of the patient was at an end, and all his former moral irritability returned.

Southampton, February 22, 1849.

ON ABSCESES OF THE PELVIS UNCONNECTED WITH PARTURITION.

By JOHN S. BARTRUM, F.R.C.S., Surgeon to the
Eastern Dispensary, Bath.

(Read at the Quarterly Meeting of the Bath and Bristol
Branch Association, March 22, 1849.)

The cases to which I wish to draw attention are—pelvic abscesses, not connected with parturition, which, not being of every-day occurrence, nor, on the other hand, presenting any very marked peculiarities, are yet of sufficient importance to receive special notice, particularly as they often cause the patient prolonged anxiety, and in their earlier stages present difficulties in diagnosis which the issue of the cases only solves. Moreover, they well illustrate how much the powers of nature will effect towards cure without receiving any more surgical aid (though that, indeed, is much) than is derived from general and constitutional remedies, without any treatment being applied to the parts at first attacked.

My attention was first drawn to diseases of this class in 1838, while acting as clinical clerk to Dr. Watson, at the Middlesex Hospital, when two cases of inflammation of the pelvic peritoneum came under my observation. Not being under the care of Dr. Watson, I did not take notes of them, but well remember that in one case there was found a large accumulation of purulent matter in the pelvis, while the abdominal peritoneum was unaffected. The other case, I believe, recovered.

CASE I.

The case which first came under my own care and notice was in a lady, single, aged about 30, of the most active temperate habits, who for two or three months had suffered from depression, languor, and a dull pain in the head and loins.

On March 30, 1842, she was attacked with pain in the bowels and groin, with a feeling of weight in the right lumbar region, extending to the pubes, which being accompanied by sickness, and the excretion of gravel was ascribed to the passage of the gravel down the ureter. On the second day there was tenderness and obvious fulness in the right iliac and hypogastric regions; the spinal column was nowhere tender. There was at first some sense of prolapsus, and continued pain in passing a motion, and bearing down in the rectum. Prior to this attack, and at each recurrence of the subsequent minor attacks, there was pain in the bladder, and partial stoppage of the urine. She continued in a weak feverish condition for a fortnight, when, while sitting at table, there escaped from the vagina a large quantity of offensive purulent matter, mixed with flakes of lymph; this discharge continued for several weeks. She had not suffered from habitual constipation. In this convalescent state she came under my care, still complaining of pain in the right iliac and inguinal regions, the

discharge being much less, and her other symptoms much improving.

After several slight subsequent attacks, she wholly recovered her health, and is now quite strong and vigorous. The treatment consisted of warm baths, opiates, effervescent salines, and absolute rest.

CASE II.

This case is one of very simple character, it having arisen from exposure to cold, and was not seated deeply within the pelvis.

November, 1845. E. D., aged 32, married, but never pregnant, having wetted her feet shortly after menstruation, was attacked with shivering and feverishness, and after some days was unable to sit down, or to pass her motions without much discomfort; her bladder was not affected. When called to her a fortnight after the preceding symptoms had first been felt, I found on examination, a large soft swelling high up, and on the left side of the vagina, between it and the rectum. In the course of ten days the swelling much increased, and when opened, a large quantity of healthy pus was let out. The patient shortly recovered, and has not felt any further inconvenience than some pain in the same region on every change of weather.

CASE III.

This case in its early stage appeared more complex, the collection of pus having caused complete retroversion of the uterus; her recovery was, however, complete and rapid.

E. F., aged 30, mother of three children, and suckling one six months old. Her labour had been perfectly natural, since when, till two months ago, she had nothing to complain of. About that time she began to find some difficulty in making water; she had no pain in the groin or abdomen, but had suffered much from a heavy pain across the sacrum.

October 20th, 1845. She applied to me on account of the utter inability to relieve her bladder. She had not passed any urine for thirty-six hours, and was necessarily much distressed. On passing the flexible catheter, the existence of some impediment external to the urethra was ascertained, and on examination I found the uterus completely retroverted, its fundus being thrown back on the rectum, while the cervix pressed on the urethra. For three days I used the catheter, and acted gently on the bowels by castor oil, intending to replace the womb, when, to my surprise, I learnt that on the fourth morning a large quantity of pus had been voided by the rectum, and found that the uterus had resumed its natural position. Her recovery was rapid. She has since had two children, without any further inconvenience.

CASE IV.

This case is one which, in its early stages, was very severe, and its diagnosis quite obscure.

A. H., aged 27, married; two children, youngest a year and ten months old.

July, 1845. Complained of pain and irritation in the rectum, simulating piles. The pain and difficulty in defecation increased, and was not relieved by

laxatives or enemas; there was also a discharge of "whites," with much pain on connubial intercourse.

September 1st. Had an attack of shivering, with headache; bowels confined, but when they were acted on there was severe pain in the lower part of the abdomen. The next day, without any sufficient reason, they became excessively relaxed,—so much so that on the slightest exertion some fecal matter passed away. In this state she continued for several days, the pain being increased by taking liquids.

4th. There had set in unequivocal symptoms of acute inflammation of the lower part of the abdomen; she was very tender in each groin, and below the navel, not being able to bear the weight of the clothes; there was no vomiting; pulse very small. The amount of pain, tension, and tenderness, varied for several days, but she gradually improved under active treatment. The result was, that after some days there was found, in the right inguinal and iliac regions, a large lump, extending from the crest of the ilium to the groin. This lasted for about a fortnight.

20th. As she sat up in bed, an urgent desire to relieve herself came on, when she voided from the rectum a large quantity of purulent matter, the inguinal tumour at the same time subsiding and becoming less tender. After the lapse of some days there was no trace of the swelling; there was no further discharge of pus. The leucorrhœa and feeling of prolapsus, with difficult micturition, also gradually passed off.

April, 1847. She had a slight return of pain in the sacrum, which one cupping, with the hot hip-bath, removed; since then she had neither piles nor prolapsus uteri; has not been pregnant till recently, being now (March, 1849) just out of her confinement with a fine healthy child. The labour had no peculiarities. The treatment during her illness was vigorous; she was twice bled; leeches were applied several times; blue pill and opium were administered, and poultices applied to the hypogastrium.

CASE V.

The case I am about to relate is much more chronic in its present stage, but at an earlier period probably presented features of acute activity somewhat similar to the last.

A. F., aged 35, has had two children, the youngest twelve years old, since the birth of which she has not been pregnant.

July, 1848. She states that seven years ago she had inflammation of the bladder, with excessive pain in the hypogastrium, and continual desire to micturate, which gave her much pain. For this she was admitted into the Bristol Infirmary, where she was for some weeks, and was freely leeches, she then requiring the use of the catheter. Since she recovered from that attack she had perfect power over her bladder, and has been able to attend to her usual domestic duties, and has not suffered from menorrhagia.

Ten weeks ago, after having been wetted in the feet and legs while carrying a child, she suddenly found a thick, yellowish, white, (apparently purulent,) discharge from the vagina, accompanied by a sense of prolapsus.

Three days afterwards, at her proper time, menstruation began, and continued for ten days. From that time she has never been free of discharge to a greater or less extent; when the discharge is not coloured, it is thick, yellow, with a constant feeling of bearing down, and desire to micturate, which feelings are much increased by walking or standing. If she is not able to relieve her bladder, it causes additional suffering; the passing the water gives rise to a cutting pain. The urine is said to have been high coloured, with a thick sediment; the bowels have been confined. She states that before and after each motion she suffers much pain, with a sense of scalding and cutting up the sacrum. The motions are reported to be streaked with blood and matter. She is never free from pain across the sacrum and hips, especially on the right side. Deep in the right iliac and hypogastric region she is very tender, and that part is fuller than on the opposite side, though no circumscribed tumour can be felt.

On examination, neither the vulva nor cervix uteri were found tender, nor the vagina, except at the upper part of the recto-vaginal septum, which at one part feels fuller and bulging, and is quite tender. The os uteri feels natural; the uterus is not enlarged, nor tender, and is quite moveable.

March, 1849. During the last six months her state has varied, though on the whole she has materially improved; indeed she has now regained the hue of health, and is able again to attend to her family duties. She has had several minor attacks, attended by throbbing in the vagina, slight shivering, and flushes of heat. On one occasion (December, 1848,) she suffered from sharp pains in the groin, after which there was an abundant thick yellow discharge from the vagina, with much relief to the groin, the feeling being described as if something had given way. Not long afterwards, when the discharge had nearly ceased for some time, on passing a motion, there was a sharp pain on the right side of the sacrum, the motions being very dark and mingled with white matter; micturition was difficult, as though there was something in the way, with pain over the pubes. Passing the catheter gave her much pain.

The treatment has consisted of very gentle mercurials, combined with tonics; the sixteenth of a grain of oxymuriate of mercury, in tincture of cinchona, twice a day, by which her gums were slightly affected, and were kept just tender for some time, with marked benefit. This was followed by three-grain doses of iodide of potassium twice a day. Local counter-irritation was an important part of the treatment; blisters applied over the inguinal region gave very great relief. There is every probability of her now getting quite well.

The question that naturally arises from the consideration of such cases as these is,—what is the original disease? To me they appear to have been phlegmonous abscesses in the cellular substance of the pelvis, internal, in all the cases, to the pelvic fascia, for neither in these, nor in any of the subsequent ones (unless connected with cancerous degeneration, which will eat its way through any tissue,) was there a trace of irritation of the nerves of the lower extremity. What they most resemble are the cases of abscess

connected with the cœcal appendix; from this disease they differ in the inflammatory action being more deeply seated, and their affecting the pelvic viscera only, the bowels appearing to have been affected only secondarily, when the abscesses burst into the rectum, which consequently became excoriated. In neither of them was there any symptom leading to the belief that the bones of the pelvis were implicated, nor did they arise from the excitement of parturition, but, probably, from the high vascularity and excitable character of the pelvic viscera in the female, especially during the period of menstruation, when the exposure of the feet or legs to wet or cold will readily excite disorder.

In men the same exciting cause would probably give rise to deeply-seated abscesses connected with the rectum and forming eventually a most troublesome fistula. To this general rule, I shall, however, presently narrate a well-marked exception.

There is a class of cases presenting all the features of inflammation of the brain occurring in middle life previous to the cessation of the menses, which cases are closely allied to these of abscess. The symptoms presented by the two most marked cases that I have seen, in neither of which had pregnancy occurred for several years, were excessive menstrual discharge, with the sense of prolapsus of both uterus and rectum, increased by standing and defœcation, accompanied by a fixed aching pain, with much tenderness deep in the pelvis in the situation of one or other ovary; there was a feeling of tumefaction in each of the cases, but I could not detect any swelling. This pain continued for some weeks and gradually passed off, though at the menstrual periods they have felt some return of the uneasiness. In a lesser degree the same symptoms occasionally present themselves after marriage or when the uterus has been injected, a proceeding to be scrupulously avoided except under circumstances of urgent necessity.

I have not yet found abscess of the pelvis connected with ulceration of the cervix uteri, nor from the nature of that complaint could such a combination be anticipated. The following case may be one of this kind, of which, however, though it has been under my observation for years, and occupied my best attention, I am by no means certain; its early stage I have no doubt was ulceration of the cervix uteri in a woman of highly nervous temperament, which disease induced frequent abortion.

CASE VI.

E. H., aged 39, has had ten children born alive, the last five years ago. Her mother died of disease of the womb. In September, 1839, she states that she was attended by a nurse, with twins of about seven months, which lived some hours. After the birth of the first the woman pulled away the placenta, after which the second child was born; from this she gradually recovered. In January, 1840, after unusual exertion she had pain in the hips and back, with occasional discharges of blood. About this time I find her down in my Dispensary book as suffering from metritis. I then knew nothing about ulceration of the cervix. In September, 1840, she aborted at eight months, after

which for some time she suffered from menorrhagia, with constant sense of prolapsus and excessive tenderness of the vagina, and she aborted several times. In January, 1844, she had a living child of about eight months, when she states the placenta was with difficulty removed; the child lived three months, she having no milk. In 1845 she again aborted, not being aware that she was pregnant. Twelve months ago she had quite recovered her health, though not so strong as originally; menstruation being natural and not profuse.

For the last six months she has been losing ground, catamenia have not appeared, but twice she has had a large amount of thick yellow discharge, and occasionally blood in the urine. For the last six weeks, (December 23, 1848,) she has perceived none in it. Throughout her long illness she has suffered from frequent attacks of vomiting, with red glazed tongue and occasional diarrhoea.

Her state in December 1848, was the following:—She complains of pain across the sacrum, hips, and pubes, down the inside of both thighs, especially in the left groin, to the inside of the left foot and ankle; has sitting pain in other parts; has pain in passing a motion; if the bowels are ever so relaxed, she is still obliged to strain with much pain in the anus and sacrum; if the motion is solid and formed it is said to be covered with mucus and slime. Occasionally she need not for a long time relieve her bladder, at other times she must frequently do so; the making water is almost always accompanied by pain above the pubes and through the passage. At uncertain intervals she passes abundantly a thin slightly-coloured discharge, making her linen stiff, starchy, and rusty coloured; this occasionally comes on in gushes without previous notice. She has also a thick yellow discharge streaked with blood, or containing amongst it small clots of blood. She has no bearing down except in the rectum. She is very tender in the left groin and towards the hip. She states that occasionally there is a large oblong swelling in the left groin, which is as apparent when lying down as when sitting up. On vaginal examination I found the uterus enlarged, not fixed, the cervix short and fissured; on the left side it feels knotty as though the veins were enlarged and varicose. The upper boundary of the vagina at that portion of the pelvis corresponding to the left groin is peculiarly tender, no other parts of the canal being so, and nothing special can be detected on the vesical surface. The secretion left on the finger is not unnatural.

In this, as well as the other cases, I have carelessly overlooked the means of diagnosis afforded by examination by the rectum, so that I cannot with confidence quote this case as one of the class I am endeavouring to illustrate, the symptoms during the last six months leading to the fear that cancerous degeneration has arisen in connection with long standing uterine disease.

Abscesses in this region are not confined to the female sex, though in the male they rarely discharge themselves by the natural passages, as in the female, but in the neighbourhood of the rectum, constituting the various forms of fistula ani. The probable reason of this difference is, that in these latter cases the

abscesses are external to the inferior layer of the pelvic fascia, while those internal to the pelvic fascia open into the rectum.

CASE VII.

To Mr. T. Barrett I was indebted for seeing a well-marked case in the male, originating apparently in inflammation of the cellular substance around or posterior to the prostate gland, thence spreading upwards, and secondarily involving the peritoneum, especially its pelvic portion. He kindly furnished me with the following history:—

J. B., aged 16, a thin weakly youth, had been labouring for two or three days, early in April, 1846, under a feverish attack. He then had severe pain in the bowels particularly over the pubes, increased on pressure; the bowels were costive and he had not passed any water for twenty hours. There being some difficulty, at the request of Mr. Barrett, I passed the catheter and drew off about three pints of urine. There was no pain or tension of the perineum. For some days the pain in the bowels and fever continued, and the catheter was passed daily. After a short time he was able to return to his employment, but in about ten days he was again laid up. He had then great and continued pain, much increased on pressure, over the whole of the bowels, but mostly over the right iliac region; he lay on his back with the right leg drawn up and had frequent rigors; he was then labouring under peritonitis. The treatment extended over about a week.

He was about again to return to his employment when ascites set in; this was, however, quickly relieved by mercurial frictions, the pain never having entirely left the right iliac region, that part being very painful on pressure, and there was always numbness down the right leg to the knee. His appetite failed him and he lost flesh daily.

One morning (about four weeks from the first attack) Mr. Barrett was sent for to him in haste. He found him on the night stool very faint and voiding a large quantity from the rectum of very offensive purulent matter unmingled with feces. He had been suddenly seized with desire to pass a motion, and before he could reach the night stool an immense quantity of purulent matter "gushed," as he expressed it, from his bowels. The quantity collected on the bed and in the pan was about three pints and a half. He continued to pass pus for about a week, in quantities varying from four to ten ounces daily, when it suddenly ceased and he recovered his health and resumed his duties.

The pain in the iliac region had been very acute the day before the abscess burst, but he lost it directly the discharge took place.

The patient continued in pretty good health for about ten months, when he had epileptic fits and became imbecile. Since then he has died of phthisis.

Post-mortem examination. April 20th, 1849.—On examining his body there was found a large quantity of fluid within and beneath the arachnoid. The upper parts of both lungs were broken down. In the abdomen there were no traces of general peritonitis, but over

the fundus of the bladder was a corrugated spot the size of a crown piece, and of a dead white colour, continuous with the layer lying on the rectum. The limits of this were almost abrupt; this consisted of the peritoneum much thickened, by the addition of dense cellular tissue on its attached side, the coats of the bladder at this part being correspondingly thickened, so that a section was upwards of a quarter of an inch in thickness; the bladder itself with this exception was healthy. The surrounding peritoneum appears quite healthy, the bladder not being tied down by adhesions, except at the part named. Just above the fundus of the bladder is a fibrous cord, the thickness of a quill, extending from the upper part of the rectum to a portion of the lower ilium, to which it is tied by a broad band of cellular tissue, the upper boundary of which is the above-named fibrous band; on opening the rectum this band had evidently been connected with it, there being a depression on the mucous surface, and a probe could be passed into it; the tissue of this band was much more intimately connected with that of the rectum than with the ilium, which did not present any appearance of an aperture that had closed up. About six inches up the rectum, opposite the thickened peritoneum and fundus of the bladder, were the traces of the abscess, the tissues at one part being hard, and intimately connected with the structure of the gut. The impression, an accurate examination of the pelvic viscera gave me was, that the inflammation had originated in the cellular tissue of the fundus of the bladder, not the prostatic portion as I had supposed, causing its loss of power, and this ended in the formation of an abscess posterior to the fundus, which, having attained a large size, and formed adhesions to the intestine, burst into the rectum. I do not know whether there was any connection with the fibrous band before described, or whether it was not one of those diverticula that occasionally are found attached to the intestines. The mesenteric glands were enlarged, but there was no tubercular deposit.

Through the courtesy of Mr. Findlater Crang, I was enabled to make a *post-mortem* examination of a case of the disease under consideration. Her history, as far as could be gathered, was as follows:—

CASE VIII.

M. A., aged 32, never having borne children, about ten years ago was supposed to have suffered from inflammation of the bowels, when she appeared to be going into a decline; she then much improved in health, and two years and a half ago she married. Four months before her death she supposed herself pregnant, from her increase of size and the severe pain she occasionally suffered in her bowels. About a month before her death she felt a sensation as if something had burst internally, which she likened to the explosion of a pistol; after this there was frequent vomiting, the bowels being then costive. She was not under medical treatment at this time, Mr. Crang being called to her only just previous to her death, February 4th, 1849. On examination the broad ligament on the left side of the uterus was enlarged, puckered, closely matted

together, and adherent to the upper part of the rectum. The left ovary, and the parts immediately around it, formed a large bag of purulent matter, which had opened itself by a round aperture, with smooth defined margins, about twelve inches up the rectum, which gut was deeply injected, and its mucous surface ulcerated in some spots. The uterus was not enlarged, and, with the vagina, bladder, and lungs, were healthy. There were no traces of cancerous or tubercular disease.

The last case which I shall narrate is one for the history of which I am indebted to Dr. Davies, by whose courtesy I was present at the *post-mortem* examination. My object in now quoting it is to show the strong contrast it presents in the severity and urgency of its symptoms to the cases of idiopathic abscess of the pelvis I have thus imperfectly drawn up.

CASE IX.

Elizabeth Chapman, aged 40, the mother of four children, had led a somewhat irregular life; first came under Dr. Davies's observation in the summer of last year. Her health appears to have been good up to the period of her last confinement, which took place three months before he saw her; the labour was a difficult one, and had to be terminated by means of instruments. She stated that sometime after her confinement, when the ordinary discharge should have terminated, there was set up a thin watery discharge, very offensive, mixed for some time with shreds of membranous matter, like soaked brown paper. The shreddy matter had ceased before he saw her, at which time her condition was the following:—Countenance pinched and anxious; much emaciated; skin soft and blanched; bowels irregular, at times relaxed at others much confined; pulse quick and weak; some degree of hectic fever; a thin, watery, offensive discharge from the vagina; examination showed great destruction of the vaginal walls; the uterus appeared of its normal size, the mouth being somewhat open, and the lips everted. She remained in the hospital about two months, when she was discharged at her own desire, being anxious to return to her family. Her general symptoms at this time were considerably improved. Dr. Davies now lost sight of her for about three months, when she again applied for admission into the hospital. In addition to her other ailments she had now a thick purulent discharge from the rectum. She lingered in the Hospital for about two months, when she died, worn out with suffering, and hectic. She suffered much from tenesmus, the pain of voiding her *fæces* being intense. She also suffered severely from neuralgic pains down the left thigh.

On dissection the body presented a state of extreme emaciation. The arch of the pubes was removed, and the whole of the pelvic viscera taken out. On examining the mass the rectum was found ulcerated and cancerous. In the cellular tissue, to the left side of the rectum, there was a large abscess, involving the sciatic nerves of that side, and which was ready to burst through the skin on the lower edge of the glutans, and communicated with the rectum by means of three ulcerated openings, one as large as a horse-bean, the other two smaller; the edges of the ulcers were thick

and rounded. On slitting the rectum open the whole internal surface was found ulcerated; examination by means of the microscope showed the diseased mass to consist chiefly of fibrous tissue, with a large number of compound cellular bodies, considered to characterize malignant growths. There were, also, numerous exudation globules. The vagina presented a shapeless cavity, nothing of the natural walls being discovered, except just at the upper part. The uterus presented a natural appearance externally, its internal surface was in a state of ulceration. The left ovary was enlarged and lobulated.

To those desirous to investigate this subject I would recommend the perusal of some interesting cases, well described by Mr. Bell, in the 36th and 37th Volumes of the *Medical Gazette*, in which essay will be found references to most of the modern writers on this disease: for my own part I have aimed only to describe such leading features of the cases as may fully identify them, and to draw the attention of the members of the Association to the existence of such maladies, which are more common than they are supposed to be, and which not unfrequently present symptoms of a very anomalous character otherwise inexplicable.

WHOLESALE POISONING BY THE ACETATE OF LEAD.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to enclose you the accompanying report of cases treated by Mr. Freer and myself, conceiving it will contain matter of interest to the profession.

I have the honour to be, Sir,

Faithfully yours,

THOMAS BANCKS.

Stourbridge, April 21, 1849.

As only some slight notice has appeared in the public prints relative to the late unfortunate cases of lead poisoning in this town and neighbourhood, and from the number of persons attacked and serious character of their symptoms, great interest has been necessarily excited, we deem it of sufficient importance to lay before the profession a few remarks on the subject, more particularly as we find no opportunity has ever before occurred to the eminent authors on medical jurisprudence and toxicology of recording the progress and treatment of so many cases at the same time.

It appears that, from the mistake of a servant employed by a miller in the neighbourhood, from twenty-five to thirty pounds of acetate of lead became mixed with about eighty sacks of flour, and were distributed to the various shops. The persons who partook of the flour, after a few days, complained of a sense of constriction about the epigastrium and throat, with violent crampy pains round the umbilicus, and

much rigidity of the abdominal muscles, a dragging pain in the lumbar region, (this latter was an invariable symptom,) and the lower extremities either cramped or partially paralysed; there was obstinate constipation, and the secretion of the kidneys scanty, and of a deep red colour; the pulse generally was slow and feeble; the countenance anxious and sunken, frequently of a peculiar livid hue; tongue flabby; gums with the characteristic blue line, and where carious teeth existed, the interior of the mouth blackened by the action of sulphuret of lead. The secretion of the skin was, in most cases, checked, and there was little development of animal heat over the surface of the body. Sickness was by no means an invariable or continued symptom, being described by the patients as having existed at first, but in many instances had subsided before medical aid was obtained. The functions of the sensorium remained undisturbed. In the more aggravated cases there was great prostration and collapse, with livid countenance and universal cramps, and numbness and other symptoms sufficiently alarming to call for the exhibition of the most powerful stimulants.

Treatment.—In most cases, from the length of time the poison had been in the system, much benefit could not be expected from the use of the stomach-pump or emetics. We found the continued use of the sulphates of soda and magnesia, largely diluted, most useful. The regular administration of enemata of gruel, with castor oil and turpentine, and where violent pain or cramps existed, in combination with opium. Enemata also, containing the sulphates and common salt, and the greater the quantity the bowels were able to retain, the more speedy the relief. The external application of turpentine, with flannels, and where sickness, (which was not frequent,) a mixture, containing hydrocyanic acid, hyosciamus, and camphor, was given with marked good effect; but we cannot too strongly dwell on the benefit derived from the continued exhibition of purgative medicines, the bowels being locked for a single day, was sufficient to produce a relapse. Milk, as an article of diet, was decidedly beneficial in all cases which came under our observation. Some of the slighter cases appeared to vary little from day to day, and to improve very slowly under treatment, the poisonous effects of the lead exerting its influence in keeping down the heart's action, depressing the nervous system, and partially arresting all the secretions. This state was more marked where previous disease of the heart or pulmonary vessels existed. In very many instances, after apparent convalescence for several days, all the symptoms returned in the same aggravated form, without any obvious cause, and up to the present time most of the persons who partook of the flour present a peculiarly pale, unhealthy appearance, but in no instance which came under our observation did inflammatory action ensue; and what is more strange, considering the number attacked in this town and neighbourhood, (upwards of 500,) and the violence of the symptoms of so many, not a single fatal case occurred.

It is impossible to conjecture the quantity taken by each person, it being very unequally mixed; and