by Hufeland, and still commended by him at the close of his patriarchal career, and it is still advocated by Meissner to whom we must accord the credit of improving the state of medical practice in Germany. A plan sanctioned by such great names commends itself; also by the facility of understanding that the well-timed subtraction of a small quantity of blood from the veins of women accustomed for more than thirty years to lose periodically some of the same fluid, is the best means of preventing or curing diseases originating in the cessation of menstruation, until the constitution has lost the habit of making so much blood or acquired some safe means of disposing of it.

Having shown the utility of bleeding, I now proceed to discuss briefly the different modes in which blood may be taken from a patient.

The effects of venesection are :—

1. To diminish the mass and plasticity of the blood, and thereby the amount of caloric produced by the processes of nutrition.
2. To slacken the energy with which it flows to some particular organ—its momentum.
3. To diminish the congestion of some particular organ.
4. To diminish the intensity of the vital powers.

The effects of leeches are similar to those of general blood-letting, but while they subtract from the system the best blood contained in the capillary system, they cannot give that shock to the system produced by its sudden withdrawal of blood from its vessels. Local blood-letting, or the application of leeches to the womb, or to the labia, or even to the anus, are modes of relieving the congestion of the ovario-uterine organs which first suggest themselves, and these applications are often highly valuable in some of the forms of menstrual suppression, but to have recourse to them to relieve the symptoms depending on the cessation of the function, would in general be injudicious, for their employment would tend to maintain a discharge, for which the term has been fixed by nature. It can only be in some very rare cases that the application of leeches to the womb at that time can be sanctioned, as in the following instance communicated to me by a medical friend :—

Case—The lady's maid of a patient of his, 45 years of age, complained of violent pain in the loins, for which Dr. Bennet ordered a mustard poultice, but as it persisted, he recommended a blister to the lumbar region. This application was immediately followed by paraplegia, and a neighbouring practitioner, who was immediately sent for, did not hesitate to give it as his opinion, that the application of the plaster in a case of lumbago was an extraordinary proceeding, which he would never have thought of adopting; and although this assertion was contradicted by another medical man, who had been subsequently called in on account of the persistence of the paraplegia, my friend received several letters from the solicitor of the family menacing him with an action, but as he set them at defiance he heard nothing more of this attempt to make him pay

for an occurrence impossible to foresee. The patient went home to her friends, and a country practitioner, more clear sighted in this instance than the eminent men of London, putting together the circumstance of the patient's age and the irregularity of menstruation, applied leeches to the womb. The result was a gradual diminution of the paraplegia, and now the patient is able to walk with perfect ease. Thus the local application of leeches may be useful to cure a disease of cessation, but in general when it is necessary to draw blood, it should be from the arm.

Older practitioners assert that the effects are very different if drawn from the arm or from the saphenous vein; at present, however, we look upon such distinctions as hair-drawn. It was formerly the custom to draw blood from the vena saphena, in cases of suppressed menstruation, requiring venesection; but during pregnancy a practitioner, fearful of producing abortion by following the same course, used to bleed in the arm. When suppression of menstruation takes place in plethoric women, I have often seen the menstrual flow return most favourably after bleeding in the arm; and thus far I think the dogmatists of a former period have overstated their position, but I would rather be guided by their opinion in the treatment of those terrible cases of suppression, determining symptoms of cerebral congestion of the greatest intensity, and often speedily followed by death. Instead of bleeding in the arm, I would apply leeches to the labia, and bleed in one or both legs, in addition to other treatment. I mention this incidentally, reserving for another time the facts on which I would ground the practice. At present I treat of diseases of cessation; and with regard to the employment of venesection, there is no disagreement amongst those who sanction the practice. All recommend the blood to be taken from the arm, thinking that by so doing they not only diminish the quantity and plasticity of the fluid, but even diminish the tendency to congestion of the abdominal organs. Blood-letting has detained us too long to admit of our now discussing the other modes of treatment applicable to diseases originating in the cessation of menstruation.

CASE OF POISONING BY OXALIC ACID.

By J. DEANE, Esq., CHATTERIS.

POISONING by oxalic acid is rare. The pain produced by it is too instantaneous, and too severe, to make it the resort of the suicide; and these very reasons, together with the rapidity of its fatal results, conspire to make it ineligible for the stealthy wickedness of the manslayer. The cases met with are, for the most part, accidental.

There is considerable discrepancy among toxicologists in their description of the symptoms of this form of

poisoning. The sensation at the throat at the instant of swallowing is differently described, according, probably, to the different experience of different writers; and the amount of neurotic symptoms has been a subject of discussion. Many of these cases being fatal, they cannot be correctly reported, as in the urgency with which we are obliged to act, and amidst the exhaustion and pain of the sufferer, a description of his sensations, or of the *subjective* symptoms is impracticable; the *objective* symptoms alone being appreciable by the medical attendant. My patient's recovery has, however, given me an opportunity of comparing my notes with his own statement, and I believe the following to be a faithful description of his case:—

J. P., 22, nervous temperament, slender and delicate, habits steady; occupation, draper's assistant. On the morning of the 11th of March (Thursday), having expressed himself as not feeling very well, he was recommended to take a dose of Epsom salts, and, by mistake, an ounce of oxalic acid, duly mixed in a cupful of water, was handed to him instead of the salts. Not liking to take medicine in the presence of his friends, he took it away with him into the warehouse; he was, therefore, alone when he took it. It was about eight A.M. He drank as rapidly as medicine is usually swallowed, but from a peculiar sensation instantly felt at the throat, he desisted, after having swallowed about three-fourths of the poison. He "felt as though his breath was going," he "was almost strangled," and he "had a horrible feeling of burning at the throat and stomach." He wondered what he had taken; was sure it was not salts, but had no idea of poison. He then attended to two different customers, and thinks five minutes must have elapsed before he gave the alarm. His appearance and his sufferings proved there was something wrong, and a brief inquiry among his friends elicited the cause. I was soon with him. He was suffering from prostration of all the vital powers; his countenance was pale and haggard, upper lip trembling, lower jaw relaxed; he had cold perspirations, especially about the forehead, and the extremities were cold; pulse small, irritable, and at once frequent and intermitting. He looked stupid, and I have since ascertained that he had at this stage of his case very little consciousness. He was taciturn; he held his hands without pressure, and with a look of agony, to the pit of the stomach; the slightest pressure on the epigastrium occasioned pain; his tongue and throat were redder than usual; there was profuse catharsis; his fingers now became contracted, and the finger nails dark; the countenance gradually assumed a darker tinge, and respiration became very quick and laborious. I have since learnt that he had a strange sensation of numbness about his limbs. Here were distinct symptoms of poisoning, which, together with the information given by the attendants, admitted no doubt of the action of oxalic acid. A table-spoonful of mustard in water had been given before my arrival, but it had not produced vomiting. I gave immediately about four ounces of prepared chalk in water, and hurried it into the stomach with the aid of the stomach pump. I found the mere

presence of the tube sufficient to excite the muscular action of the stomach. I pumped two large basins of chalk and water into the stomach, and found no difficulty in securing its return. Constant vomiting being now kept up, and the fluids ejected as rapidly as they were introduced, I exhibited the antidote so freely, that all the remaining acid must have been neutralized, and I washed the stomach so thoroughly with chalk and water, that the resulting salt must have been removed. About fifteen minutes were spent in these proceedings. He was then arranged as for bed, but for convenience sake, we placed him in a reclining posture on a sofa, and, fully aware of his danger, we anxiously waited the result of the contest which his system would have to undergo. He continued to be sick. I found, however, to my satisfaction, that the fluids ejected were free from oxalic acid. Knowing, however, the necessity of works of supererogation in these cases, provided they do not distress the patient, I prevailed on him to take a basin of thickened milk, considering that if any oxalic acid crystals happened to be in the stomach, they would be taken up by a substance so pultaceous, and viscid, and that they would thus be removed, because I knew that whatever was swallowed would soon be ejected. He was now rallying rapidly. I had found it necessary to administer stimulants in small quantities. About two hours passed in this way. At half-past ten the matters vomited were tinged with blood, and very soon they consisted, to all appearance, of pure blood, of a bright arterial colour, and fluid. At one P.M. it began to take, and gradually took, the form of coagulation, and ceased towards night. During the entire day he had frequent attacks of cramp in the legs and feet, which were soon relieved by pressure. At eight P.M. I found him still vomiting whatever was given, but there was no trace of blood. During all this time he was allowed warm drink freely, as it made his vomiting easy. His pulse was more or less intermitting during the entire day; at this particular visit, eight P.M., it was 125, small, irritable, and intermitting. The skin was hot, his head ached, he complained of great exhaustion, and of severe pain at the epigastrium, increased on the slightest pressure. His tongue and throat were much paler, had a dingy whiteness about them, were very hot and dry to the touch. Thirst very urgent. A large blister was applied to the epigastrium. The state of the pulse prohibited bleeding, even by leeches. The next morning (nine A.M.) I found his symptoms much milder; pain relieved; febrile heat less; pulse 100, small, irritable, but not intermittent. He had had frequent startings during sleep, and much cramp in the limbs; frequently his hands were involuntarily clenched when awake. His finger-nails were dark, and remained so for several days. During this day (Friday) vomiting was frequent; in general it was free from blood, slightly streaked at times.

Catharsis having been one of the most distressing symptoms on Thursday, I did not require to administer a laxative. During the night of Thursday a peculiar eruption presented itself over the whole surface of the skin; it was an exanthema, and the dermatologist

would call it roseola. As it subsided it left the skin very dark, so much so as to attract the notice of his visitors. The cuticle afterwards desquamated.

Whether the exanthema was the result of some condition of the blood, produced by oxalic acid, or whether it was occasioned by gastric irritation; whether the dark appearance of the skin was the declining stage of the exanthema, or the outward manifestation of some temporary change in the condition of the blood, or in any way a result of the semi-convulsive state of the system, I shall leave the reader to decide. Its disappearance by desquamation seems to make it merely a natural sequel of the eruption. I am not aware that these cutaneous symptoms have been before noticed in these cases.

The night of Friday the 15th was favourable, vomiting having occurred at slight intervals only, and without blood. I found him on Saturday morning in every way improved. There was but little febrile heat; pulse 94, fuller, and less irritable; no epigastric pain; headache very slight. There was a slight streak of blood in the matters vomited, and at four P.M. some vivid arterial blood, a symptom which gave some little alarm. Two hours afterwards he vomited a quantity of viscid secretion, and about a table-spoonful of dark coagulated blood, after which he expressed himself as much relieved. Sunday was yet more favourable, and from this time he gradually recovered his usual health and strength. He complained for several days of heat in the throat, and he suffered very much from thirst. He required laxatives for some days.

I am inclined to think that the last ejection from the stomach, which I have just described, was occasioned by the detachment of a slough of mucous membrane; but I could not satisfy myself on this point, although I carefully examined both the matters vomited and the alvine evacuations. The mucous coat must have been severely injured. Certain it is that from this time the vomiting distinctly abated; and the next morning (Sunday) I felt pretty certain of his recovery.

I shall not enter into any statement bearing on the treatment of the case. I have drawn up this paper chiefly as a description of symptoms. Death from oxalic acid is in general so rapid that we seldom have a clear and full view of the symptoms of a case from its first morbid symptom through the horrible stage of its violent action on the system and on the stomach, onwards to complete recovery. The case shows, in a remarkable manner, the action of oxalic acid on the nervous system, as well as on the mucous membranes. It points out very clearly the instant burning in the throat and stomach produced by it; and seems to prove, by the feeling of suffocation as instantly produced, that the neurotic symptoms are not occasioned by the injury to the stomach, but simply a direct action on the brain and nervous system, produced after a very rapid absorption of the poison. No medical man could have seen the first symptoms in this case without coming to the conclusion, that the deaths, almost instantaneous, of which we hear as resulting from oxalic acid are due to this action chiefly, and approximate in their nature to

death from prussic acid. Christison gives special prominence to the nervous symptoms, and describes them as immediately following the poison, as in the case just narrated; other writers describe them as setting in after the action on the mucous membranes is thoroughly established. In my case the nervous symptoms and the corrosive began, continued, and ended together.

Chatteris, Cambridgeshire.

CASE OF TUBAL FŒTATION.*

By JOHN MORLEY, Esq., BARTON-ON-HUMBER.

On January 13, 1849, 11 P.M., I was requested to attend H. T., aged 27, single woman, a servant at Barton-on-Humber, who, after having finished her work in apparent health, proceeded up stairs at 6 P.M. to wash herself, and was suddenly seized with acute pain in the abdomen, and faintness, which caused her to fall on the bed; she vomited once what appeared to be rice-pudding, (part of her dinner taken at one o'clock). At seven, she asked her mistress to milk the cows, as she felt too ill to get up. About half-past ten she became suddenly worse, and requested that medical assistance might be immediately procured, as she felt as if she should die.

I found her at eleven, undressed, on the bed, lying on her left side; surface universally cold and blanched; lips blue; mucous membrane of mouth exsanguine; respiration performed slowly, and with great effort; pulse at wrist almost imperceptible; impulse of heart very faint. She lay with eyes closed, yet perfectly conscious, and able to give an account of the commencement and progress of her case. The slightest attempt to raise her head from the pillow, (as when taking stimuli, which she partook of freely without increasing the abdominal pain), caused her to faint. She complained of severe pain in the abdomen, which increased at intervals. From the appearances presented by her breasts, I asked if she did not consider herself to be in labour, which she did not, although she admitted that she had given birth to one child eleven years ago, and had not been unwell since the beginning of last August. On examination per vaginam, I found the os uteri closed, the cervix in the unimpregnated condition. On making as careful an exploration of the abdomen as the state of the patient would admit of, no gravid uterus could be felt. On gently percussing the parietes, fluctuation could be detected on the left side. In the right hypochondriac region was a large tumour, which could be easily moved about. Stimulants were freely administered, and warmth applied externally, without, however, the slightest benefit; she gradually sank, and at two A.M., of the 14th, expired. Immediately after death I

* The preparation connected with the above case was shown at the Anniversary Meeting at Hull, but the case has only recently been forwarded to us.—Ed. J.