and hesitating manner. Many suffer for years, with alternate periods of aggravation and improvement. Of the relation of cause and effect between the "measle" of the pig, or *cysticercus cellulose*, and tapeworm, this town affords ample evidence. I have ascertained that large quantities of "measly" pork are sold and used as food in Birmingham. It is not exposed for sale in the public markets, but is disposed of privately, and much of it is employed in the manufacture of sausages, in which one of my pupils (Mr. Lloyd) and myself have found portions of the "measle" with the microscope. These are made use of to a large extent by the working classes, and are frequently eaten imperfectly cooked or nearly raw. Although the worm must be for the most part destroyed in the mincing, it may frequently escape sufficiently intact to renew its life in the bowels.

CASE III. Ellen Mills, age 24, had had tapeworm for seven years. She had already been treated for it, but she could not tell what remedies were used. They had no effect. She had no solid food for twenty-four hours, and then took two drachms of the oil of male-fern in mixture with milk, according to Dr. Fleming's formula. No purgative was given. The male-fern operated in five hours. Half a basinful of joints were expelled with the first stool. The bowels were moved three times. The patient complained only of pain in the stomach. (Schedule of Dr. Anderson, Resident Physician to the General Hospital, Birmingham.)

CASE IV. H. B., a female, age 30, had had tapeworm for one year. The treatment comprised first salt-fish diet for three days, then fasting, then three grains of calomel at bedtime, and castor oil at 5 A.M. next morning. At 6 A.M., one drachm of oil of male-fern was given; then at 8 A.M. another dose of castor oil; and at 10 A.M. a second dose of one drachm of oil of male-fern. This plan of treatment was followed twice, once without success; but the second time large masses of the worm were expelled, broken into pieces. Some portions were very thin and tapering, but the head was not found. Ten months have passed since this treatment, and no relapse had occurred. (Schedule of Dr. Arthur Ransome, Manchester.)

CASE V. J. P., a female, age 42, had had tapeworm for one year and a half, and had taken for it castor oil and turpentine without benefit. She fasted a whole day, and took at bedtime one drachm and a half of the oil of male-fern in mucilage; next morning, an ounce of castor oil. The worm was passed in its entirety during the night, and before the castor oil was taken. She felt a slight sickness before the worm was expelled. All her unpleasant symptoms were removed. (Schedule of Mr. Humphreys, Shrewsbury.)

CASE VI. Ellen Davis, age 2 years, had had tapeworm for six weeks. No previous treatment. On June 14th, a draught composed of fifteen minims of oil of male-fern in one ounce of mucilage was given in a teacupful of gruel, and followed by a dose of castor oil in half an hour. In two hours after the exhibition of the oil of male-fern, several fragments of tapeworm were expelled. No uneasiness was complained of in the interval. On the 16th, the same treatment was repeated: and, eight hours after the oil of male-fern was taken, more fragments of tapeworm were voided, but of smaller size. During the interval, the child was ill, refused food, and complained of pain in the bowels. On the 18th, 20th, and 24th, the draught of the oil of male-fern was repeated. Under the last date, it is stated that there were no worm-symptoms whatever; and the child's appetite, which was formerly capricious, was now uniformly good. (Schedule of Mr. Cornbill, Birmingham.)

Original Communications.

COMA FROM CHLOROFORM INHALATION (SUICIDAL): GALVANISM: RECOVERY.

By WILLIAM NEWMAN, M.D. Lond., St. Martin's, Stamford.

ON October 10, 1863, I was hastily summoned to a man who was said to be dying. I went at once (1.45 P.M.), and was shown to a bed-room on the first floor, where I found my patient lying on a bedstead in the dark corner of the room, insensible to all external impressions. He was lying on his right side, partially undressed, with a woollen comforter wrapped round his head, and his face pressed down into the pillow; not so much so, however, as to prevent a view of the left side of his face, or to interfere with respiration.

The window was at once opened, and the bedstead dragged out into the room. On turning the man from his position, the face was found to be very much congested, almost black; the eyes closed as if in sleep, the irides widely dilated, and the pupils fixed; the mouth partially open; the tongue lying within the teeth. The whole skin was dark to a degree, and moist with cold sweat. The respirations were from six to eight in each minute, and irregular in force and rhythm. The pulse was about 52 in the minute, very feeble, yet regular. The heart's action was very faint, but regular in beat. The breath smelt of chloroform; and a little search discovered a basin with about three ounces of the drug still in it, and some oily matter floating on the surface of the liquid. This was at some distance from the bed; and there was no handkerchief nor cloth near the face on which it seemed that chloroform had been poured.

I sent a messenger to get my stomach-pump and galvanic apparatus; and meanwhile I employed cold affusion and cold sponging, rubbing the chest vigorously afterwards with a dry towel. This had no perceptible effect; the intervals between the respirations were so long, that after each one, it seemed that the last breath had been taken. Then, for about five minutes, a trial was given to Dr. Silvester's mode of performing artificial respiration. The arms were raised from the sides above the head, etc.; but, although with each upward movement air audibly entered the chest, there was no increase in the rapidity of the respirations when the arms were left to lie still on the bed.

2 P.M. I introduced the stomach-pump tube into the stomach. Nothing but a very little glairy fluid escaped. A pint or more of water was injected, and then withdrawn, smelling faintly, yet very decidedly, of chloroform.

2.5 P.M. The galvanic apparatus (Kemp's of Edinburgh) was set in action. The sponges, previously moistened in salt and water, were applied; one about the lower end of the sterno-mastoid muscle to excite the phrenic nerve, the other pushed deeply into the scrobiculus cordis so as to stimulate the diaphragm. Occasionally, the latter sponge was moved about over the surface of the chest so as to excite the pectoral and intercostal muscles. Several minutes passed over before the influence of the current made itself strongly evident, and then the muscles were thrown into action very readily.

2.15 P.M. The respirations were 12 in the minute; the pulse 65, and more powerful. The heart's action was much more evident. The face was possibly not quite so dark. There was no return of sensibility whatever.

2.40 P.M. The face was certainly not so dark. The respirations were 15 in the minute, deeper and more prolonged. The pulse was of better volume, about 65 per minute. The pupils acted now under the stimulus of light, and tended to remain more contracted. He was still insensible to the voice or to pinching; but moved slightly when the position of the sponge was changed on the chest.

3.15 P.M. He had found his voice. He objected suddenly and forcibly to the galvanism, and had just raised himself up in the bed.

When the man had thoroughly recovered, I made further inquiry, and was at once answered, that he had inhaled the chloroform with the full intent of destroying himself; that he was quite uncertain either what quantity he had employed, or for what length of time he had breathed the drug; and lastly, he was very emphatic in his statement that he had not swallowed any.

It is probably not too much to say that, but for the remedial measures employed, this man would certainly have died. The profound insensibility to stimuli, the infrequent respirations, with the slow and flickering pulse, were sufficiently reliable indications of impending death. The impression on my mind certainly was, that he had swallowed the drug in some quantity; the odour about his breath, the absence of any arrangement for convenient inhalation, etc., tended to mislead me; the fluid, too, with which the stomach was just once washed out gave very sensibly the smell of chloroform.

The case simply tells us the use of galvanism, persisted in with but few intermissions, for very nearly an hour before sensibility returned; and having this ultimate satisfactory result only, it would seem, from the rendering more active the respiratory movements; so eliminating with greater rapidity the poisonous agent, and counteracting the tendency to death by paralysis of the medulla.

For the treatment of dangerous symptoms occurring at a much earlier period of chloroform inhalation, distinctive rules are as yet wanting; and these, it is much to be hoped, will result from the inquiries of the Chloroform Committee of the Royal Medical and Chirurgical Society. If in the mean time any reader of the *BRITISH MEDICAL JOURNAL*, who has practically put the matter to the test, would state the best mode of using galvanism, with the most convenient apparatus, in the treatment of syncopal seizures in patients under the influence of chloroform, he will confer a positive benefit on his professional brethren.

SEVERE DYSMENORRŒA—SUCCEEDING PROFUSE MENORRHAGIA—CURED BY THE RUSSIAN VAPOUR-BATH.*

By JAMES WILLIAMS, M.D., Accoucheur to the
Malvern Lying-in Charity.

H. M., æt. 25, of fair complexion, small but well developed, commenced menstruation at 15; after a few months regularly she removed to a neighbouring town, when the catamenia entirely disappeared, but at the usual periods she suffered from bad headaches, nausea, backache, etc.

On her returning to Malvern, the discharge reap-

peared and continued with great regularity, but became excessive in quantity, and in the course of two or three years produced so much languor and debility as to seriously interfere with her duties. At this time she was induced to place herself under hydropathic treatment, which in this case was not so successful as is ordinarily reported. She was directed to use tepid, and afterwards cold Sitz baths during the continuance of the discharge. The effect of this treatment was to check the discharge; to render it gradually more painful, clotted, shreddy, bright red, and inflammatory in appearance.

The pain frequently extended down the legs, rendering walking impossible, and also induced great irritability of the bladder. This symptom became peculiarly distressing, the patient being unable to retain the urine more than half an hour at a time, even after the menstrual period had passed away; she also experienced pains for days before the discharge appeared, and then the agony was such as frequently to induce vomiting, and also to confine her to a couch or bed for the remaining four or five days of the period.

As I have stated, headache and languor remained, so that the patient scarcely recovered from one attack before another ensued. I determined, under these circumstances (the patient having been under a long previous course of medical treatment without benefit or relief), to give her the chance of recovery by the vapour bath. Her period being due in nine or ten days, she had only time to take three baths on alternate days. The discharge came on while she was in the third bath (two or three days earlier than usual), and with only a slight spasm; but, from the patient's having to walk some little distance, the pain became severe, requiring opium, hot mustard fomentations, etc., to render it tolerable. She recommended the vapour bath on alternate days, but the next period was, nevertheless, a very painful one, and required an opiate injection, with morphia internally and saline aperients.

The vapour bath was recommenced on alternate days, followed by a tepid (and at first) warm shallow bath. This plan I invariably adopt now, as I find it generally approved by the patients, and it seems to brace up the skin more effectually than the shower bath, which I formerly used; and the shock of the latter is undesirable also, particularly in nervous subjects.

Her next period was decidedly easier, and came, as before, in the bath with little pain; the discharge was darker in colour. She went home in a carriage, and was quite well in a few days, except the irritability of the bladder, which still continued. It occurred to me that alkalies, etc. would relieve this symptom, but I feel bound to confess that medicine had no influence upon it.

I now made a local examination, suspecting vascular tumour of the orifice of the urethra (as described by Sir C. M. Clark), and found this to be the case. I therefore applied a weak solution of nitrate of silver, which gave obvious relief, and by continuing it occasionally for a few weeks, the patient was enabled to retain the urine several hours.

By continuing the use of the baths on alternate days, the pain at each period was reduced to a moderate degree, and became quite tolerable; and with this change the discharge became dark coloured and natural, and free from the shreddy and coagulated state. She now regards herself as *cured*; she has become four pounds heavier during the three months she has been under treatment, which is sufficient evidence that the vapour bath has not reduced the patient's muscular tissue.

In this case I made an early examination of the

* The vapour bath, to which I refer, encloses the whole person, and is sufficiently large to allow the patient to recline or move about, if he wish to do so. It is also heated by *superheated vapour*, which acts upon the whole mucous membrane of the lungs, as well as upon the external surface of the body. By this arrangement, the temperature is seldom required higher than 100° or 110°, or about 30° less than the Turkish bath; and, at the same time, the unpleasant dryness of the latter is avoided. The patients are never in the slightest degree liable to take cold after its use.