used the wire ligation in very numerous cases. People had expected too much from the wire, whether iron or silver, when they thought it would never produce suppuration. No doubt there was a great difference in different constitutions, but he had seen both kinds of wire set up suppuration in cases of operations on the perineum, and he had seen little or no suppuration set up with silk ligatures in the old operation. In some cases suppuration followed, no matter during how short a time the wire remained in.

Dr Gillespie wished to explain that he had been led to write his paper in consequence of a passage in Dr Young's pamphlet. He did not wish it to be supposed for an instant that he objected to the use of iron wire, but only to its use in the form of a seton. He was satisfied that no amount of care could prevent the occurrence of suppuration in some cases; this might depend partly upon the constitution of the patient, but also probably upon other causes. Atmospheric influences might have some effect, and it was possible that an hospital was not the best place for trying this mode of treatment. Another point to be noted was, that the introduction of the wire was not always at once followed by acute inflammation, and that suppuration did not occur for some days; in these cases no amount of care as to the early withdrawal of the wire would be an efficient protection.

PROCEEDINGS OF THE EDINBURGH OBSTETRICAL SOCIETY.

SESSION XX.—MEETING I.

November 14, 1860.—Dr Keiller, President, in the Chair.

I. ON A NEW MODE OF ADMINISTERING CHLOROFORM.

Professor Simpson stated, that for some time past he had used chloroform in a manner somewhat different from that in which he was formerly in the habit of administering, and recommending it to be administered; and he believed that by the new method the patient was more rapidly anæsthetized, and at the same time a great saving was effected in the quantity of the drug employed. The difference in the two modes of administration consisted in this, that according to the old plan the fluid was poured upon a cloth folded into several layers, and the hand of the administrator had to be kept between the cloth and the patient's face, in order to ensure the due access and admixture of air; while, in following out the new method, one single layer of a towel or handkerchief was laid over the patient's nose and mouth, taking care not to cover the eyes, and on this single fold the chloroform was poured, drop by drop, until complete anæsthesia was induced. There was little or none of the drug lost by evaporation when it was administered in this manner, for the patient inhaled it at the moment when it was poured on the cloth, and inhaled it mixed with a sufficient quantity of air, which was easily inspired through a single layer of any ordinary napkin. Dr Moir had been long in the habit of administering chloroform in this way upon a handkerchief thrown over the patient's face. He (Professor Simpson) believed it would add to the safety with which the drug might be employed, to administer it in the manner he had described. He had often feared lest the lives of patients should be sacrificed by the careless manner in which, in particular, students and young practitioners sometimes applied the damp folded cloth over the patient's face, without admitting a sufficient supply of air; and he had no doubt that many of the deaths attributed to chloroform were due only to the improper administration of it, and were, consequently, no more chargeable on the drug itself, than were the many deaths resulting from accidental overdoses of opium, etc. But the dangers from careless and improper administration would be diminished if there were never placed over the patient's nose and mouth more than one single layer of cloth, moistened with a few drops of the fluid. The first patient to whom he had administered it in this manner had been chloroformed several times previously, and
had never gone to sleep till an ounce and a half or two ounces of the fluid had been employed; but when administered drop by drop on a single layer of a thin towel, one drachm had sufficed to induce the most profound sleep. It had thus all the advantages that had ever been claimed for the complicated apparatus which some medical men were still in the habit of using. There was only one precaution to be attended to in employing chloroform in this manner, viz., care should be taken to anoint the lips and nose of the patient beforehand with oil or ointment, to prevent the skin from being injured by the contact of the fluid that resulted from the close application of the wetted towel to the patient's face.

Dr Peter Young stated that he had recently administered chloroform in the manner described by Professor Simpson, to a patient in labour, and that he had kept her asleep for ten hours with only two and a half ounces of the drug.

Dr Keiller remarked upon the difficulty that was occasionally experienced in putting some patients to sleep, and stated that a hysterical patient then in his ward had used an enormous quantity of chloroform before she could be brought under its influence. But he had no doubt that it had been administered in the manner Dr Simpson had just proposed to do, a much smaller quantity would have sufficed; and he might state that when he himself suffered from severe earache on one occasion, he had put one or two drops of chloroform on cotton wadding and held it into his mouth, and a very few deep inspirations served to relieve the pain. He (Dr Keiller) had since then frequently applied chloroform very advantageously in this way in cases of tic and other neuralgic affections.

Dr Alex. R. Simpson had administered chloroform in the manner under discussion in a considerable number of cases, and always with the result that a great saving was effected in the quantity employed. He had the day previously kept a boy, on whom Mr Edwards was operating, asleep for more than half an hour with between two and three drachms of chloroform, and some of the fluid first poured out was lost in consequence of the resistance made by the patient to its administration.

II. PAINFUL MUSCULAR AND FASCIAL CONTRACTIONS ALONG THE VAGINAL CANAL—VAGINODYNIA.

Professor Simpson said that he had lately seen a number of cases, and he had seen them from time to time for years, where painful muscular or fascial contractile bands existed in the sides or along the course of the vagina. He had known some of these cases to have been mistaken and treated for various alleged affections of the uterus or its appendages. The pains complained of were, sometimes, principally sympathetic or reflex, and referred to the uterus or other parts, and often aggravated by all movements calling the pelvic muscles into action. He had under his care at present a patient whose chief complaint was a constant disagreeable pain in the sacral region; another who had the same severe kind of pain in the left iliac region; while a third could not walk because of the pain which she felt in the pelvis whenever progression was attempted. In this class of cases the uterus and ovaries would, on careful examination, be found healthy, but a tense, corded, transverse band could be felt at some part of the vaginal wall, and usually, if not always, on one side of it, and placed, as it were, more or less deeply beneath the mucous membrane. The band or cord was most commonly placed about an inch above the vaginal orifice. It varied considerably both in thickness and tenseness in different cases. When the cord was touched and stretched with the finger, the patient complained of more or less severe suffering; and this was the pathognomonic mark of the disease. Sometimes the patient only experienced pain at all when the vagina was touched; and these cases usually came under treatment in consequence of being unable to submit to marital intercourse. He had one patient under treatment who could not bear at first to allow herself to be examined vaginally without chloroform, because of the pain experienced from the touch of the finger. Painful and distressing as these cases were, they were very amenable to treatment,—division or rupture of
the tight and contracted band being usually sufficient to afford complete, and often instantaneous, relief; and in the milder form of cases, sedative applications were sometimes sufficient. The method he had usually adopted for the cure of very severe cases of this kind was, after chloroforming the patient, to divide the tight band by means of a tenotomy knife introduced underneath the vaginal mucous membrane. It was a bloodless operation, and had never been attended with any worse consequences than the formation of a thrombus, which had taken place in one patient and had delayed her recovery. He had tried also to effect the object of stretching or rupturing the band by dilating the vagina forcibly with the fingers, whilst the patient was asleep with chloroform. The principle of cure was the same as that employed for the relief of fissure and spasmodic contraction of the orifice of the rectum, But less severe means were occasionally successful. Patients afflicted with this complaint were usually relieved, and sometimes cured, by the daily introduction into the vagina for a length of time, of local sedatives, such as belladonna ointment and chloroform. A small cup-like indentation was made with the finger in an ordinary belladonna pessary; a few drops of chloroform having been poured in, and then shut in by putting a piece of ointment over the orifice, and then the whole was introduced into the vagina, where the ointment slowly dissolved, and became absorbed along with the chloroform. As to the probable nature of these painful contractions, he (Dr Simpson) could not supply any very definite answer, but he thought they depended in different cases either, first, on a kind of permanent spasm of some of the muscular fibres around the vagina, of the same nature as the spasm of the sterno-cleido-mastoid muscle, which produces torticollis; or, secondly, they were due to contractions going on slowly in some portions of the pelvic fascia, perhaps resulting from a kind of subacute inflammation, and resembling those often painful contractions of the palmar fascia, which are the acknowledged cause of "crooked-in fingers." Dr S. believed that the common anatomical seats of these painful vaginal contractions were either in the bundle of muscular fibres forming the anterior border of the levator ani, or in the duplicatures or edges of the pelvic or recto-vesical fascia at the points where the vaginal canal perforates the fascia and receives insertions and prolongations from it. These contractions sometimes appeared in patients in whom no previous disorder of any of the pelvic organs could be ascertained to have existed; and he had lately seen one patient who was the subject of it, and who had never been able to allow her husband to approach her, so that in her the morbid condition must have been present before marriage, although she had never been in a position to be made aware of its existence. Instances, however, like this last oftener belonged to a class of cases where apparently the stricture was not, as in the preceding class, in the course of the vaginal canal, but was situated at its very orifice, independently apparently, in most, of all disease there except supersensibility and spasm of the sphincter of the vagina, but traceable in others to hyperesthesia of the mucous surfaces of the vulva or vagina, resulting from irritating eruptions or other morbid states of these mucous surfaces.

Dr Keiller stated that he had several times seen painful, contracted portions high up in the vaginal canal, associated with a kind of prolapsus of a lower portion. He believed that these contractions would be found pretty frequently if they were only looked for; and he could recall to mind a number of cases where patients had been subject to pains in the pelvis, the cause of which he had been unable to trace, but which were probably due to constricting bands such as Dr Simpson had been describing.

III. NEW INJECTING APPARATUS.

Dr Simpson showed how a tube, such as is used for the introduction of carbonic acid gas into the vagina, might be modified so as to serve along with an ordinary beer bottle, instead of a syringe, for applying injections and douches to the rectum and vagina. Dr Scott of Musselburgh had been in the habit of employing the bottle and tube for some time instead of an enema syringe, and
for the purpose of introducing food into the stomachs of insane patients who refused to swallow. A bottle filled with the required fluid, and stopped with the cork, through which the tube passes, having been raised and turned upside down, when the cork was partially withdrawn some air rushed into the bottle and sent out its fluid contents through the tube. He (Dr Simpson) had got a cork made with a small secondary tube, which served to admit the air into the bottle, so that the partial withdrawal of the cork could be dispensed with, and whilst the bottle was held up with one hand, the other was left free to hold and direct the nozzle of the tube. The stream that issued from the tube might be made to run with a greater or less degree of force according to the height to which the bottle was elevated. Another simple form of injecting apparatus, on the same principle, consisted of the usual tin canister with which some enema apparatus were provided, perforated at its lowest edge, and having a long caoutchouc tube attached to this perforation at one end, and terminating at the other extremity in the usual form of enema nozzle. This apparatus acted well, and was cheap. He had used it for injecting both the rectum and vagina. When filling the apparatus the nozzle of the instrument must of course be held higher than the canister; and when using it after it is filled, and the nozzle inserted, then the canister is merely raised higher than the tube, and the liquid flows into the rectum or vagina without the jerking or per saltum motion of the common enema pump. A sufficient amount of elevation of the canister gave the fluid all the force that was necessary to send it into the rectum by mere gravitation. Valves in enema apparatus were expensive, and always going wrong. In this apparatus there were no valves.

MEETING II.

November 28, 1860.—Professor Simpson in the Chair.

I. POST-PARTUM HEMORRHAGE.

In the absence of Dr Alexander Wood, the President read the following notes of a case of post-partum hemorrhage, which had been drawn up by the house-surgeon of the Lying-in Hospital, where the case occurred:

"Christina MacDonald, act. 23, unmarried, admitted October 23, 1860. Fine healthy-looking young woman, with florid countenance. Has given birth to one child between a year and eighteen months ago. This labour was not attended by any bad symptom. Has never had a miscarriage. Labour came on at 7 A.M. on the 23d of October; was delivered at 2 P.M. same day. Presentation natural, and uterine pains strong. Membranes remained entire until the first stage was finished, when they were ruptured. This operation was attended with a small amount of hemorrhage, which stopped with the next pain. The child was expelled by the next uterine contraction. The placenta was allowed to remain for a quarter of an hour, when it was expelled by nature. After the patient had been in her bed about an hour, she had an attack of vomiting, closely followed by profuse hemorrhage. The uterus was at once cleared of all clots, cold douche applied to the abdomen, ergot was given, and cold water injected into the rectum. The vomiting still continued, and not until the patient had fainted could the hemorrhage be controlled. The uterus having now somewhat contracted, a small basin was bound down over it. The hemorrhage had now stopped. An opiate was administered. Patient passed a good night.

"Upon seeing her in the morning she seemed much refreshed by the night's rest, and, with the exception of weakness, was doing well. She continued to improve up to the seventh day, when, against orders, she arose. About 7 o'clock on Friday, November 2, she was again seized with severe hemorrhage; this, after many expedients had been tried, was at last overcome. At 11 A.M. was again attacked. In the meantime, Dr Wood had been called in, who ordered the stimulants to be continued; but as the hemorrhage had quite ceased, and the womb felt contracted, no examination per vaginam was made. Patient
passed a restless night. Next morning, Dr Wood, accompanied by Dr Moir, saw her at 10 A.M. A vaginal examination was made by these gentlemen, when they found no bleeding, but the os uteri was found closed. A small polypus was removed from the posterior wall of the vagina. About half-an-hour after, had another slight attack of hemorrhage. From this time, although stimulants of every description were used freely, patient sank, and expired at 12 o'clock the same day.

With regard to the preparation of the uterus, Professor Simpson remarked, that it presented nothing peculiar except the degree to which the process of fatty degeneration had taken place. It was not very easy to see where the fatal hemorrhage could have come from; and he moved that Drs James Sidey and Alexander Simpson be appointed a committee to examine and report upon the preparation at the next meeting.

Dr Moir stated that he had only seen the patient once, an hour or two before the time of her death, and hence had had no very favourable opportunity of arriving at a clear diagnosis as to the nature of her case. But on making an examination of the uterus, per vaginam, he had felt on the back wall of the vagina, in its upper third, a spongy, friable, kind of polypus, attached by a broad basis to the surface of the mucous membrane. This having been removed by Dr Wood with the finger, was seen to be quite flaccid, and deeply stained with blood, and the bloody and vascular condition of this body had led him (Dr Moir) to believe that it had in all probability been the source of the hemorrhage of which the patient had died.

### II. FURRERAL CONVULSIONS.

Dr James Sidey read the following notes of twin labour complicated with albuminuria and convulsions:

Mrs P——, age 30. Had always enjoyed good health, and had never had any symptoms of kidney disease. First pregnancy at the full time. Was seized about 2 A.M. on Monday (12th Nov.) with labour pains, which continued till noon, when she was delivered of a child—a female, which presented by the head. During the labour she had chloroform, and I was struck by the small quantity required to produce anaesthesia,—three inhalations were sufficient. On placing the hand on the abdomen, another foetus was felt. At the expiration of an hour, no contraction of the uterus having come on, I examined and found the membranes entire, and the head and right foot presenting. The membranes seemed to me to be perfectly rounded in form, and very full and tense, similar to what is felt in delayed labour from over-distention from liquor amnii; and yet the uterus was not so firmly contracted of itself as to make any impression on the membranes. I endeavoured to rupture the membranes by scratching them through against the head of the foetus, and with difficulty succeeded; when, taking hold of the foetus by the foot, I delivered the second child—a male. Both children alive. The placenta were single; that of the first child was removed from the vagina; that of the second was adherent, and required to be removed from the uterus. So far she did well, and I left her very comfortable about 3.30. About an hour after, however, she complained of an intensely severe pain in the head, particularly in the back part. The nurse applied cold cloths without relief. About 6 P.M. she was seized with a convulsion, which lasted for about fifteen minutes. When I saw her at 8 P.M. she had had four similar. At that time she was insensible; pupils contracted; face hot and suffused; pulse 90; with constant twitching of the left arm. I immediately bled her to 3xij, when she became sick and vomited, and when I tied up the vein she was sensible, and said her headache was gone. She was ordered ice to the head, and sinapisms to the feet. At 1 A.M. (Tuesday) was seen; had two slight fits; ordered a blister to the nape of neck, and a mixture of acet. potasse and tart. antimon. At 7 A.M., since being seen, has had fits, recurring every half-hour; bled her again to 3xij. Noon—Has had three very violent fits; quite insensible; pulse 120; left side much convulsed; face very red and suffused; bled to 3xij; a blister to kidneys,
and leeches to head; urine highly albuminous. 10 P.M.—Has had no more fits; pulse 120; is now sensible, but drowsy; is restless, however, and there is constant tossing of the legs; ordered turpentine enema, and five gr. cal., to be followed by castor-oil in the morning. Suspecting that the bladder was distended, I attempted to introduce the catheter, but could not in consequence of her restlessness. I therefore administered chloroform; when the spasms of the neck of the bladder was removed, and the urine flowed freely away in considerable quantity. After this she slept for four hours. Urine highly albuminous.

Wednesday.—Doing well; urine drawn off, not so albuminous.

Thursday.—Doing well.

Friday.—Pulse 90; milk in the breasts; complains of pain in arm, probably from section of some small nerves in the bleeding; relieved by chloroform liniment; urine still albuminous; has since kept going on favourably, with the urine gradually getting less albuminous, till Friday, 23d, when there was none. I did not allow the children to suck till the albumen was gone from the urine.

Dr Sidey stated, in addition, that in delivering the second child he had made several attempts to rupture the membranes with his finger-nail, which had proved ineffective in consequence of their unusual toughness. After the birth of the first child he observed on its head several scratches or abrasions of the cuticle, which he could not account for otherwise, than by supposing that the scalp had been injured during his attempts to rupture the bag of membranes. Yet it seemed very unlikely that such distinct injuries could have been produced simply by the nail of the finger, whilst the membranes were still entire; and he was not aware that the possibility of the production of lesions of the scalp under such circumstances had been taken notice of. Dr Sidey added further, that he believed the beneficial action of bleeding in cases of convulsions depended on the relief that was effected in the congestion of the kidneys, and he related the history of a case that seemed to bear out his theory.

Dr Gordon spoke of the beneficial results he had witnessed from the employment of chloroform in cases of puerperal convulsions. He remarked that the more chloroform was used in the treatment of patients who were the subjects of that disease, the less necessity there was for having recourse to the severe and exhausting treatment of blood-letting, and gave the history of a case in point.

Dr Simpson observed that there still occurred cases from time to time in which it was necessary to have recourse to blood-letting, and Dr Sidey's seemed to be such a case. But bleeding to the extent of many ounces—and he had on one occasion seen it carried to the extent of 80 ounces—as a means of curing the mere convulsions or the state producing them was no longer believed in by the profession at large. He thought that occasionally it was of use in preventing some of the evil effects of the convulsions—as cerebral congestion and haemorrhage—which were occasional consequences of the convulsions. It averted the morbid consequences of the convulsions, but did not remove their morbid causes.

Dr Moir had frequently, in the earlier years of his professional life, drawn 60 or 70 ounces of blood from patients suffering from puerperal convulsions, but he could not recall a single instance for several years past in which he had found it necessary to have recourse even to a slight blood-letting.

III. PROTRACTED GESTATION.

Dr McCowan related the history of a woman who, in her third pregnancy, carried her child three months beyond the period at which it had been calculated that it should have been born. The child had to be extracted with the forceps, and was found to have a greatly ossified head, and to be largely developed round the shoulders and the pelvis, so that, although there might have been some miscalculation as to the exact dates, there seemed little doubt that uterine gestation had been protracted for an unusual length of time. Calculating from about fifteen days after the date of the last menstruation, the child should have been born in the latter part of May, but it had not been born till the 20th of August.
Dr Bruce remarked that patients sometimes made considerable mistakes in their reckoning, and he had lately delivered a woman two months after it had been calculated that the child was due.

Dr Moir observed that, in the case related by Dr McCowan, the data were not determined with sufficient precision to admit of its being cited in a legal court, although, from the state of the fetal head, and the previous history of the patient, he had himself little doubt that gestation had in her been protracted, though not, perhaps, so long as three months beyond the normal period.

IV. RUPTURE OF THE PERINEUM.

Mr Carmichael mentioned the case of a patient who had sustained a rupture of the perineum, on the occasion of her delivery in the country some years ago. She had been subjected to the operation of epyisoraphë by Professor Simpson nearly two years ago, and having subsequently become pregnant, she came to town to place herself under his (Mr Carmichael's) care during her confinement, as she believed the original injury to have been due to some carelessness on the part of her previous medical attendant. The labour went on normally, until with the last pain, which expelled the head, a slight tear was produced in the perineum; and as the shoulders passed out the rent was completed as far back as the sphincter. He believed that in this case it was quite impossible to prevent the rupture from taking place, and that neither himself nor the gentleman who had attended the lady in her first confinement was in the least in fault, for this reason, that the descending rami of the osa pubis met at such an acute angle in front, that, whilst the fetal head was emerging from the genital canal, he (Mr Carmichael) could easily pass his finger between the back of the head and the arch of the pubes, and the necessary result of this morbid diminution of the angle of the pubic arch would be that the head and body of the child must have been pressed unusually far back upon the perineum during their passage through the vulva. He wished to mention this case, because he was desirous to obtain some information as to whether, in cases where rupture of the perineum was thus reproduced, there usually existed some abnormal condition in the anatomy of the parts such as he had referred to, and such as might account for the recurrence of the injury. He might add, that the wound had been sewn up about four hours after the labour was terminated; that the iron-wire stitches had been removed a few days ago; and that the patient was making a good recovery.

Dr Sinclair stated that he had delivered a patient who had been subjected to the operation for rupture of the perineum, and that the labour had terminated without any fresh rupture having been produced.

Dr Sidey, Dr Cochrane, and Mr Pridié, each gave the history of cases that had come under their own observation, where rupture of the perineum to a large extent had taken place during labour, and had healed up completely without having been subjected to any surgical treatment, and where, on the occurrence of subsequent labours, no new damage had been sustained.

Dr Moir expressed his conviction that patients were liable to rupture of the perineum when they were brought under the influence of chloroform to such a degree as simply to deaden their sensibility to pain without destroying their power to use strong bearing-down efforts with the abdominal muscles. Believing that rupture of the perineum was more frequent now than formerly, in consequence of these unrestrained and semi-involuntary but powerful efforts on the part of the patient, it was his practice, especially in the case of primiparae, to allow the patient to wake up completely for a time, whilst the head was pressing on the perineum, lest it should be forced through before the structures had become sufficiently relaxed to admit of the safe transit of the child.

Dr Gordon stated, that in his experience the use of chloroform served rather to diminish the risk of laceration of the perineum, from the degree to which it favoured the relaxation of all its structures, but more particularly of its abundant muscular fibres.