and especially of colonial students. The great obstacle to the introduction of this reform is one which I am afraid I have already had occasion to indicate — the necessity which it implies for pecuniary assistance. It is essential for the success of the scheme that a large building should be erected, capable of accommodating about one hundred students, and that it should be endowed with means sufficient at least to secure a warder of good parts. It would be most important to avoid any lavish extraction of money from those who live in the college, such as occurs in residence colleges elsewhere. The expense to the students should, indeed, be restricted to a reasonable sum for board. As it may be anticipated that such an establishment would be mainly occupied by colonial students, who number upwards of 260 at the present time, and as we are told that in the colonies large sums of money are sometimes amassed, even by members of our profession, I would commend this scheme to the best consideration of colonial enterprise and benevolence!

I must now conclude the remarks that have been suggested to me by the specially memorable events of the time at which I have the privilege of addressing you. I offer no excuse for having brought these topics under the notice of this meeting. The experience of the past has shown that in this Society many of those who have exerted the most powerful influence upon medical progress and education have received a valuable portion of their training. The present circumstances of the Society encourage me to hope that this influence will be continued in the future. That the Royal Medical Society may always meet with success and prosperity must be the fervent wish of every one who has at heart the best interests of the Medical School of Edinburgh. I trust that in this new session, and in subsequent sessions, still larger numbers may join the Society than have hitherto done so; for then there would be conferred upon increasing numbers of students the high educational and social training which has in the past been so eminently effective in elevating the tone of our profession and in increasing the reputation of our University.

III.—PODALIC VERSION—ITS PLACE IN OBSTETRICS.

By S. Lawrence, M.D., L.R.C.S., Montrose, Corresponding Member of the Edinburgh Obstetrical Society.

(*Read at the Quarterly Meeting of the Forfarshire Medical Association, held at Dundee, 29th January* 1885.)

Every operative and manipulative procedure, whether surgical or obstetric, has its own special history, possessed of more or less interest; and it may not be inappropriate to take a cursory survey of the rise and progress of podalic version before submitting to your notice some portion of my own experience in regard to it. Such a

retrospect, although necessarily brief and imperfect, may help to keep alive in our minds a grateful remembrance of names inseparably associated with invaluable service both to our profession and humanity.

To Ambrose Paré, who flourished during the 16th century, and to whom the art of surgery owes so much, especially for his introduction of the ligature for wounded arteries, is due the credit of having first recommended podalic version in cross births. His proposal was strenuously opposed by his contemporaries, and its adoption was by no means general till long subsequent to his death. One is naturally surprised that the force of prejudice, however strong, should have delayed the acceptance of what is so manifestly an important addition to the resources of the obstetric art. A very limited experience might have sufficed to show that in cross presentations podalic version was a very valuable procedure. Demonstrably, it was an expedient vastly superior to laborious and generally futile attempts to bring down the head (the only species of version known to the ancients), to lopping off a protruding arm, or to the haphazard practice of leaving the case to the too often ineffectual efforts of nature. Slowly but surely the advantages of turning the child in such cases became manifest; and this at first disparaged procedure ultimately commanded universal assent, and became the established mode of practice. It was Ambrose Paré, also, according to his pupil Guillemau, who first inculcated the practice of turning in all cases of dangerous floodings during labour—a practice which subsequently received the support and advocacy of another distinguished French accoucheur, namely, Mauriceau.

At what time in the history of midwifery version was employed in labours complicated with convulsions, and who had the merit of first showing its adaptation to such cases, I am unable to assert; but its performances in this grave obstetric emergency marked an important stage in its progress, and strengthened its claims to the confidence and gratitude of accoucheurs. Yet strange to say, at a period not more remote than 1814, we find Dr Merriman writing disparagingly of such a method of procedure.

A great advance took place in the progress and practical utility of podalic version when it was employed in cases of difficult labour from contracted pelvic brim, as a substitute for the long forceps and craniotomy. It is perhaps impossible to determine with certainty to whom the merit is due of having first extended its use to such cases, but it may be regarded as a well-established fact that Sir James Simpson was the first publicly to commend the practice, and to vindicate its claims to professional acceptance. At a meeting of the Edinburgh Obstetrical Society, held on the 20th January 1847, Dr Simpson narrated the case of a contracted pelvic brim in which, on the preceding day, he had performed version as a substitute for craniotomy, the mode of procedure which had been had recourse to

in the previous confinement of the patient. He at the same time stated that in several similar cases he had adopted this practice, and he succinctly but clearly enumerated various important advantages it possessed. Then, in December of the same year, appeared in the *Provincial Medical and Surgical Journal*, the first of a series of papers from the same active and fertile brain, which extended over the successive monthly numbers of that periodical for the following year (1848), elaborately expounding the theory of the practice, enforcing its safety and efficacy, and replying to real and imaginary objections against it. Those papers marked a new and memorable departure in the history of version. In their grasp of principles, their fulness of details, their vigorous polemic, and their thorough and exhaustive discussion, they are entitled to rank among the most characteristic and interesting of Dr Simpson's numerous contributions to the science and art of obstetrics; and they may justly be regarded as the Magna Charta of podalic version. The impression they produced was wide-spread and influential; and it may be confidently affirmed that from the date of their appearance down to the present time not only have fewer fœtal crania been brought into contact with the remorseless crotchet, but that far fewer maternal lives have been sacrificed by difficult and protracted labours. A few years after, viz., in February 1852, Dr Simpson resumed discussion of the subject in the pages of the *Edinburgh Medical Journal*, adducing a larger experience in corroboration of the views and arguments he had formerly advanced. But while Professor Simpson was unquestionably not only the ablest, but the first public exponent and advocate of podalic version in contracted pelvic brim, there is another name specially deserving of honourable mention in connexion with this practice. And as a quondam and grateful pupil of the late Dr James Wilson, sen., of Glasgow, it gives me much pleasure to bring forward his claims. A concise, but most interesting paper, entitled "On the Advantages of Turning in Certain Cases of Narrow Pelvis," was read by Dr Wilson at a meeting of the Glasgow Medico-Chirurgical Society, on the 12th October 1847, and published in the *Edinburgh Medical Journal* of the following May. The opening sentence of that paper strikes the key-note of the whole question. "When the head," says Dr Wilson, "in certain cases of parturition is prevented from entering the brim of the pelvis from defective form, or insufficient space, are we to resort at once to embryotomy—the general practice—or may we not, with some prospect of saving the child, accomplish delivery by turning?" But I wish to fix attention specially on what immediately follows. "For upwards of thirty years (observe this was said in 1847) I have been in the habit in such cases of effecting delivery by turning, and I have good reason to believe that the lives of many children have been saved by this practice without the lives of the mothers having been in any degree endangered." From this statement I think we are warranted to con-

clude that Dr Wilson had been, if not the first, at least among the earliest accoucheurs to employ turning in place of craniotomy in cases of contracted pelvic brim; and that had he been endowed with a larger measure of self assertion, he might have laid claim to a leading position in relation to this practice, and have thrown the clear light of his experience around it, a full quarter of a century before the sun of the great Edinburgh Professor shone forth with meridian brightness, paling all lesser luminaries in his beams. In short, as regards the respective merits of these two eminent men in relation to podalic version in cases of contracted pelvis, the case stands thus:—In the adoption of the practice, whether or not he was its originator, Dr Wilson had precedence of Dr Simpson by a long series of years; in the public announcement and vindication of it Dr Simpson antedated Dr Wilson by nine months. With characteristic modesty and candour Dr Wilson, in a footnote to his paper, concedes Dr Simpson's claims. He says, "Whatever may be the value of the practice recommended, Dr Simpson has the merit of first giving it publicity." I mention only one more writer on this question—one who in his day had the ear of his brethren in matters obstetrical—the late Dr Alexander Milne of Edinburgh. In the March number of the *Edinburgh Medical Journal* for 1867, an important contribution, read before the Edinburgh Obstetrical Society in December 1866, appeared from his pen, emphasising all that had been advanced by Sir James Simpson in 1848 and 1852, and narrating additional facts well fitted to remove any lingering doubt or scepticism which might still be haunting the professional mind, and preventing the general adoption of a great practical improvement in the obstetric art. I take this opportunity to commend to the renewed attention and study of my professional brethren those several papers I have named. From the intrinsic importance of the subject of which they treat, and as marking the onward progress of medical thought and opinion, they may still be read and pondered with all the zest and interest with which they were received on their first appearance. And should attempts be at any time made to restore the forceps to the first place amongst our expedients in cases of contracted pelvis, I know no better counteractive to such a retrograde movement than a due consideration of the facts and arguments which those papers present.[1]

I desire now, with all deference, to bring into view the estimate I have been personally led to form of podalic version as based on my own practice. Not to travel over too wide a field, I shall

[1] It may be alleged that the invention of Tarnier's axis-traction forceps changes the whole aspect of the question. I greatly doubt this. This instrument is ingenious, no doubt, and may be possessed of special advantages in certain cases. But until its advocates are more agreed among themselves as to its best mode of construction, and until the profession generally have had longer experience of its powers, it will be wise to abide by podalic version as the safest and most efficient procedure in the great majority of cases of labour with contracted pelvic brim.

restrict attention to the experience I have had of it during a consecutive series of 500 midwifery cases, extending over the last few years, and but recently terminated. Speaking generally, the result of my experience is not only to establish the conclusion pleaded for by Sir James Simpson and others, that it is invaluable as a method of procedure in cases of difficult labour from contracted brim; but also a most important expedient in cases of threatened tedious labour from inefficient uterine action. In other words, I have been in the habit of frequently employing podalic version, not only where there was difficult labour from the presence of mechanical obstruction, but *where there was the prospect of injuriously prolonged labour owing to the absence of adequate propulsive power.* Or to speak in the scholastic language of Dr Merriman, I have frequently performed turning in cases of *dystocia anenergica,* threatening to pass into *dystocia diutina.* I at once and candidly admit that I cannot plead the sanction of any recognised authority—of any great name—for such an employment of podalic version. But if the course I have pursued has been somewhat novel, I may be allowed to point in its vindication to its results, and to affirm that the end which was attained *seemed* at least to justify the means.

In the 500 cases under review I had recourse to podalic version in all 43 times. The varied circumstances under which I employed it were—

1*st.*	For mechanical obstruction from contracted brim, ...	22	times.
2*nd.*	„ Arm presentation, ...	2	„
3*rd.*	„ Puerperal convulsions, ...	1	„
4*th.*	„ Insufficient uterine action threatening tedious labour, ...	18	„
		43	„

Omitting, as not pertinent to this discussion, the cases of arm presentation and puerperal convulsions, podalic version was thus performed 40 times in uncomplicated natural presentations in those 500 cases. In 22 cases it was had recourse to to overcome mechanical obstruction; and in 18 because of defect of uterine propulsive power. Let me now state with what results version was followed. In 9 of the 22 cases of contracted brim, the contraction being known beforehand, premature labour was induced about the end of the 8th month, and all the 9 children were born alive and survived. In the remaining 13 of these 22 cases, labour occurring spontaneously at or about the full time, there were 9 living and 4 dead-born children. One patient bore two of these dead children in her first and second confinement. In her third pregnancy premature labour was induced, with the result of having a living child, but as the presentation was that of the breech, version was of course forestalled by nature's kind arrangement. This did not, however,

supersede the necessity of much tractile force to effect delivery. In the 18 cases in which version was employed because of inefficient uterine action there is much satisfaction in recording that all the children were born alive, and all the mothers made excellent recoveries. In the 9 cases of induced premature labour there were 2 cases of maternal death—the remaining 7 made very good recoveries. Reviewing the 22 cases of contracted pelvic brim, it will thus be seen that by means of podalic version 18 children were born alive. I am thoroughly convinced that in but a small proportion of those cases would the forceps have availed for delivery, and consequently that the only alternative to version was craniotomy. That during the whole of my 500 cases, with all the difficulties which many of them presented, I was able to avoid this dire resource of the obstetric art, is a fact for which, in its retrospect, I feel profoundly thankful. In the Dublin Lying-in Hospital, under the mastership of Dr Johnson, as reported by Drs Hardy and M'Clintock, we find that on an average in every fifth case of tedious and difficult labour craniotomy was the expedient adopted, podalic version never having been once employed, for the simple reason, we may presume, that its adaptation to such cases was then either unknown or not believed in. With the further knowledge we now possess we cannot help lamenting the immense sacrifice of infant life which accrued from the practice then followed. Similarly, as we peruse and shudder over the long dark roll of 95 craniotomy cases given in the Clinical Midwifery Report of the late Dr Robert Lee of London, we are irresistibly impressed with the conviction, that the employment of podalic version would not only have prevented such a frightful "massacre of innocents," but would have been rewarded, probably in three-fourths of the cases, by the birth of living children. Indeed, that an immense saving of infant life in difficult labours from contracted brim has been effected by turning no longer admits of doubt or denial.

But what in regard to the obviously more valuable life of the mother? This is a question of primary importance, for any procedure adopted to save the life of the child which at the same time, and of necessity, entailed undue hazard to the mother, would by that very fact stand professionally and morally condemned. It is one of the arguments adduced by Sir James Simpson in vindication of podalic version, that it is safer to the life of the mother than craniotomy, and he quotes statistics to show that, while in craniotomy the mortality to mothers had been found to be 1 in 6, in turning it had been only 1 in 16. I regret I am unable to present such a favourable statistical view of maternal mortality consequent on turning. In the 22 cases in which I had recourse to it for contracted pelvic brim, I had 3 maternal deaths—nearly equal to 1 in 7. But, in extenuation of this apparently high ratio of mortality, I have to state—1. That in regard to one of the fatal cases the death seemed altogether independent of, and uncon-

nected with, anything peculiar to the labour, for in all respects the patient progressed most favourably for a week after labour, when a chill from imprudent exposure caused an attack of peritonitis, which proved fatal four days after; and 2. That in both the other cases there was the existence of disease before labour began. While, therefore, craniotomy in those three cases would have deprived three children of life whom version saved, I am unable to believe that this operation, or the use of the long forceps (granting that these could have been used), would have placed any one of the mothers under better conditions for a favourable result.

It would occupy too much space and time to give in detail a report of the 40 cases in which, during the currency of the 500 midwifery cases, I practised version, and whose results I have just summarized. They may be arranged into groups, thus:—

First Group.—Comprising cases of contracted brim, in which labour occurred spontaneously at or about the full time, in number	13
Second Group.—Cases of contracted brim, in which labour was induced at or about the end of eighth month, ...	9
Third Group.—Cases of threatened tedious labour from uterine inertia, ...	18
	40

All I can attempt is to subjoin two or three cases of each group; in other words, to give a part for the whole.

First Group.—*Contracted Brim—Delivery at or about Full Time.*

Case I.—Mrs C., multipara. On my arrival I found the liquor amnii had been evacuated some time before; the head above the brim, and making no descent, although the pains were good. The os uteri was lax and fully dilated. After waiting nearly two hours without any progress, I placed her under chloroform, and performed version without much difficulty. Extraction, however, required considerable effort for some minutes by myself and the nurse. The child was born much asphyxiated, and some time elapsed before respiration was established. A decided projection of the promontory of sacrum was found to exist. The child lived, and the mother made an excellent recovery.

Case II.—Mrs M. Had been in labour some hours before I arrived. The os was soft and dilatable. The liquor amnii had been some time discharged. Head fixed at brim, notwithstanding good pains. After waiting for a time, and finding no progress, I turned under chloroform, and delivered without great difficulty. Child considerably asphyxiated, but was gradually brought round. Mother made an excellent recovery. This was Mrs M.'s fourth confinement. I attended her also in her third,

and delivered in the same way under similar circumstances, and with equally satisfactory results. In her first and second confinement she had been attended by another practitioner, and was delivered on both occasions with forceps, it was said, with much difficulty.

CASE III.—Mrs W. C. Head for several hours at brim; projecting promontory of sacrum, with pain somewhat deficient in strength. Liquor amnii discharged an hour or two. Turned under chloroform, and delivered with an ordinary amount of tractile force. Child soon breathed freely. Mother made a good recovery.

CASE IV.—B. M. The history of this case was somewhat special. The patient was small in stature and in general development, and presented a conjugate diameter of pelvis seriously compromised by a protruberant sacral promontory. Although unmarried, she had had two confinements during the previous six years, and on each of those occasions, after long attendance by midwife, craniotomy had to be performed—the first time by Dr Key and myself, the second by two of our local brethren. It was quite a serious prospect to our professional staff to have a third time craniotomy to perform on behalf of this patient under the miserable circumstances in which she was placed; but hope dawned upon us from an unexpected quarter. Having had the good fortune to meet Dr Halliday Croom at Brechin in July 1882, on occasion of the anniversary of the Forfarshire Medical Association, I brought the case under his notice, and he kindly offered to receive the patient into the Edinburgh Maternity Hospital for the purpose of performing the again, as it was thought, inevitable craniotomy. A few days before the time fixed on for her departure to Edinburgh, I was met by the midwife in one of our streets, and received from her the very unwelcome intelligence that labour was begun. With much urgency she besought me to "haste to the rescue." Filled with unhappy forebodings of what lay before me, and keenly disappointed that the irony of fate had so signally traversed what really seemed in every respect "the best laid scheme," I went at once to the wretched house in which parturition was to be accomplished. The pains had been for some time regular and strong, and on examination I found the os well dilated, and the head, as formerly, decisively arrested at the brim. The liquor amnii had been discharged for an hour or two. The bones of the head feeling somewhat loose, and therefore compressible, I thought it might be possible to turn, and drag the child through the brim. I accordingly gave chloroform, and performed version. Very much difficulty was experienced in pulling the shoulders and head through the contracted pelvis; but, with the help of the midwife, the feat was accomplished. The parietal bones were found considerably flattened by

the pressure to which they had been subjected, and the head consequently elongated. Believing the infant, when born, to be quite dead, I laid it aside, *sans ceremonie*, and gave my whole attention to the poor mother. After a minute or two, despite the severe ordeal it had encountered, and much to my surprise, it distinctly indicated that *it meant to live*,—heaving at first a few feeble gasps, and by-and-by breathing and crying with commendable vigour. The mother made an excellent recovery; and the child, although *not* an illustration of "the survival of the fittest," still continues, after two and a half years, to hold on its way.

SECOND GROUP.—*Labour Prematurely Induced.*

CASE V.—Mrs P. Labour induced at end of eighth month owing to narrow pelvic brim. On being called, I found the os nearly fully dilated, and quite soft. The liquor amnii had begun to be discharged thirty-eight hours before, and had been dribbling away ever since, but pains had only commenced an hour or two before my arrival. Having given chloroform, I performed version with some difficulty. The infant was at first somewhat asphyxiated, but by-and-by respiration was fully established. Mother's recovery very satisfactory. The previous history of this patient is noteworthy and instructive. I do not know the particulars of her first confinement, only that the child was born alive at the full time. I assisted a brother practitioner at her second confinement. The head was arrested at the brim, version was performed, but the child was dead. The third confinement was under my own charge. It was also at the full time; the head was again arrested at the brim; version was performed with much difficulty, and again there was a dead-born child. Being now satisfied that the degree of pelvic contraction existing was incompatible with the birth of a living child at the full time, I resolved, in the event of another pregnancy, viz., a fourth, to bring on labour at the close of the eighth month. This in due time I accomplished, delivered by turning, and had a living child. On the occasion of her fifth pregnancy, I was unfortunately not informed of her condition until she was well advanced into the ninth month. I lost no time in inducing labour and effecting delivery by turning, but the proper time having been allowed to pass, the child was born dead. A sixth, seventh, and eighth pregnancy followed during the five succeeding years, and having been duly informed of her condition, I on each occasion induced premature labour, and delivered by turning, with a successful result both to mother and child.

CASE VI.—Mrs B. Her third labour, artificially induced at end of 8th month, owing to antero-posterior contraction of pelvic brim. On arrival found that liquor amnii had begun to be discharged nearly twenty hours before, and that pains had been slight and infrequent. The os was only partially dilated and difficult to

reach. Head high in the pelvis, and did not seem to descend with the pains. Being afraid to wait till the liquor amnii was all discharged, and when the uterus might be tightly grasping the child, I by-and-by gave chloroform, slowly introduced my hand, and with moderate ease accomplished version and extraction. The child was a little livid at first, but soon breathed freely. The mother had an excellent recovery. This patient in her first confinement was delivered by forceps with much difficulty. In her second pregnancy labour occurred, *sua sponte*, at the end of the 8th month, and was accomplished with comparative ease. Acting on nature's hint thus given, labour was artificially induced, as narrated, in her third pregnancy, and subsequently in her fourth, with equally successful results.

Case VII.—Mrs M'K.; fourth confinement. On my arrival I found that the liquor amnii had been evacuated three hours before. Os uteri about half dilated and rather rigid. After waiting a short time gave chloroform, and slowly dilated the os with the hand, cone-shaped—brought down a foot, and gradually accomplished delivery. The child was soon quite lively. The mother made a good recovery. In this patient there was nothing special in her first confinement. Her second showed a degree of obstruction at the brim, and delivery was accomplished by version with some difficulty, but with a living child. In her third pregnancy (as well as her fourth) labour was induced at end of 8th month, and delivery accomplished by version, with a satisfactory result.

Third Group.—*Tedious Labour threatened from Uterine Inertia.*

Case VIII.—Mrs L.; third confinement. Called at 5 A.M., found head at brim, and pains feeble. Returned at 11 A.M., found os now fully dilated, membranes protruding, but head still at brim. Ruptured membranes, and waited some time, when the pains still continuing feeble and inefficient, I chloroformed and turned. Delivery was accomplished with moderate ease, and child was lively from the first. The mother's recovery was in all respects satisfactory. This patient required the forceps in her first labour owing to imperfect uterine action towards its close. In her second the pains were vigorous throughout, and no help was needed.

Case IX.—Mrs M., a few miles distant in the country. On my arrival I found the head at brim, and owing to feeble infrequent pains making no advance. After waiting two or three hours, and seeing no prospect of a change in the character of the labour, and the patient's spirits becoming depressed, I chloroformed, performed version, and effected delivery with comparative ease. The child breathed well at once. I attended this patient in a previous confinement, when, the circumstances being similar to those now described, I pursued the same practice, with equally satisfactory results

CASE X.—Mrs D., primipara. Evening—Pains regular all day, but very feeble; head at brim, os dilated. After some hours waiting, attempted forceps, but failed to apply both blades. I then performed version and delivered without much difficulty. Child breathed well from the first. Mother made an excellent recovery.

CASE XI.—Mrs L., residing in the country. Called at midnight; found the os a little dilated and pains almost entirely suspended. When they returned they were feeble and inefficient. After waiting four hours without any promise of improved conditions, and finding the os rather more lax and dilatable, I performed version under chloroform, and delivered with moderate ease. The child was soon vigorous. The mother made an excellent recovery. Several previous confinements in which I attended this patient were accomplished without difficulty, and a subsequent one was over before my arrival.

CASE XII.—Mrs W., primipara. Head at brim, pains feeble; liquor amnii evacuated before my arrival. After waiting between two and three hours without any improvement, I chloroformed and performed version with moderate ease, but considerable tractile force was required for delivery. The child was at first asphyxiated, but by-and-by gasped, and soon after respiration was fully established. The mother made a satisfactory recovery.

And so I might go on till I had narrated all the 18 cases in which I employed version for feeble and inefficient uterine action, with advantageous results both to mothers and children. But the limited time of our meeting must impose restraint. The cases I have given will sufficiently exemplify the practice I have pursued. I do not enter on the well-trodden ground of the best mode of performing version, and of the caution necessary to guard against contingent injury to both the lives involved in each case. I have nothing to state on these topics in addition to what is familiar to all. But I may be allowed to remark that, from the experience I have had, I firmly cherish—and have long cherished—the conviction that midwifery possesses in podalic version an aid in many of its pressing difficulties, the full value of which is in all probability not yet sufficiently appreciated. No doubt it is competent to any opponent to allege, in regard to the cases of mere uterine inertia in which I employed it, that a little more patience would have been rewarded with successful results, without manual interference and its attendant risks. Possibly so; but I am equally entitled to maintain that had I refrained from the procedure I adopted I might have had to interfere at a subsequent stage of the labour, when all the circumstances of the case were less favourable for so doing, and when the chances of safety, both to mother and child, were greatly diminished. For it is an established fact, and ought never to be forgotten, that maternal and fœtal mortality proceed at an advancing

ratio according to the time the labour has been allowed to continue before operative help has been given. In midwifery practice it will often prove a question beset with much difficulty, and at the same time one imperatively demanding *yea* or *nay* in reply—Can this case be safely or prudently left to the powers of nature, or ought artificial aid to be rendered, and nature's efforts supplemented? The teachings of the class-room, and the canons laid down for our guidance in text-books, will often fail us in such emergencies; and we shall find ourselves thrown on our own individual judgment for the counsel and direction we desiderate. Moreover, not only all the training and all the experience, but all the self-possession of the accoucheur, will ofttimes be needed in order that he may arrive at a just decision in any given case. And every conscientious practitioner will not only regard it as an object of intelligent interest, but will feel it an imperative obligation, afterwards to determine whether the decision he adopted, and the course he pursued, stand vindicated by the result. With such general remarks I now leave the practice I have been commending to the verdict of my brethren.

Let me adopt as a fitting close to this paper the words of Dr Keiller, a name well known and justly esteemed over broad Scotland and beyond it, and doubtless nowhere more highly than in his native town:—"Of all our obstetric aids none are so handy or so safe as that which we can never attend any case without, namely, the hand. I have been getting more and more convinced that a well-trained, well-directed hand, might in a much greater measure than is generally supposed supersede the use, by accomplishing the work, of other and less convenient instruments. And when we consider that, unlike the touch of cold, hard, unfeeling steel, it possesses a specially keen sense to guard and guide the maternal and fœtal parts on every side, the objections urged against its almost entire efficacy may well be disputed. . . . . The single, well-conditioned, well-practised hand will outdo and prove more than a match for a whole armoury of special weapons." [1]

IV.—SPHYGMOGRAPHIC TRACINGS IN PUERPERAL ECLAMPSIA.

By J. W. Ballantyne, M.B., C.M., Buchanan Scholar.

(*Read before the Edinburgh Obstetrical Society, 14th January* 1885.)

In the three following cases of Bright's disease, complicating pregnancy, parturition, and the puerperium, I was enabled to make a series of sphygmographic tracings, and to gather from the consideration of these sphygmograms some indications as to the condition of the blood pressure and the pulse in this comparatively rare affection.

[1] Inaugural Address by Dr Keiller to the Obstetrical Society of Edinburgh, Session XXXI.