exertion is made on our parts to conduct the case with as little inconvenience or pain to the patient as is possible. Pain in the seat of pressure we look upon as an evil; but there is a pain, and that sometimes for a few hours a very sharp pain, to the advent of which we anxiously look forward. I allude to pain in the neighbourhood of the knee-joint, which pain is the harbinger of cure. This pain is due to the rapid enlargement of the collateral circulation, dependent upon the diminished calibre of the aneurismal sac, encroached upon by the deposit in it of fibrine, and is best combated by narcotics.

So far, gentlemen, for our Irish plan of treating aneurism by compression: I now come to the question so often asked me, why we should be so successful, and you so much the reverse, in thus treating aneurism. I confess that the tone in which this question has occasionally been asked me has pained me very much. A doubt in the truthfulness of our statistics has not been openly expressed; still "*c'est le ton qui fait la musique*", and so with this question. This is a painful theme upon which to descant, as painful as I feel it to be unnecessary before such an audience as I have the honour now to address. The majority of our cases have been conducted not only in the presence, but with the assistance, of our students in our public hospitals. Under these circumstances, to attempt to colour the facts would be worse than a crime, for it would be a blunder. No! gentlemen, before you I feel that it would be a work of supererogation to attempt to vindicate the character of Irish surgeons for honour, truth, and loyalty to our common profession; whilst, on the other hand, to no man will I yield in profound reverence for what has been done in the past, what is being done in the present, by British surgeons, for the scientific progress of our profession. Therefore is it that I feel myself acquitted of any unworthy motive in placing on record my ideas as to why we should succeed and you should fail.

First, and above all, we have faith in the efficacy of our treatment, and reverently be it expressed, faith can do all things. Your experience can scarcely justify you in entertaining such faith.

Second. In this instance, at all events, the spirit of nationality pervades our ranks, and the humblest, the most indolent, the most apathetic surgeon amongst us, will try every expedient ere he will acknowledge that in his hands the Irish method of cure has failed.

Third. Our hospitals are visited at 9 A.M.; yours, I believe, at 2 P.M. By our arrangements we are enabled to visit our patient, and to commence his treatment under our personal supervision at an early period of the day.

Fourth. All our hospitals are within a few minutes' drive of the residences of their surgeons; thus are we enabled to pay during the day repeated visits to such cases, and so to watch them from hour to hour; and no matter how zealous, how intelligent, be the house-surgeons or the pupils, there is no eye equal to the master's for seeing that the work be done. That such surveillance imposes great trouble on the attending surgeon I freely admit, still it must always be borne in mind that it was *per tadia et labores* that this plan of treatment has been brought to its present perfection, and that *pour réussir il faut travailler*. You know best, gentlemen, your arrangements in these respects.

Fifth. Thoroughly aware, as we are, of the pathological changes which must be brought about in the contents of the sac to effect a cure, and convinced, as we are, of the principles whereby alone these changes can be produced, we are not afraid, during the night, to remove all pressure, and so to secure for our patients uninterrupted sleep, whereby we keep up their health to the condition most favourable for fibrinous deposit in the sac.

Sixth. And here I trust that I will not be considered as blowing too loud a blast on our Irish trumpet, I am of opinion that some of our success must be attributed to the intelligence of the patients whom we are called on to treat. Many are the instances in which their co-operation has proved to us of inestimable value. One of the class of instruments (the clamp) of which, even to the present day, we frequently avail ourselves, is due to the suggestion of a patient, a carpenter by trade, of the late Professor Harrison's; and, did time permit, numerous other instances of the truth of this assertion could be adduced.

Finally, the physique of our patients differs widely, I suspect, from yours. I fancy that the disease occurs, in the majority of English patients, in the persons of well-fed, robust, and plethoric individuals; such patients will require a compressing force of high tension; but as a rule it may be laid down that if the force employed exceed that which would be represented by a *dead* pressure of nine pounds, the pain to which it will give rise will soon render it intolerable. Our patients rarely, if ever, present such appearances; they rather incline to the opposite extreme—and when such is the case, we are obliged to call to our assistance good diet. 'Tis true that the plethoric individual may be reduced by regimen, etc., to the *juste milieu*. Still, after all, it is but human nature that we should find patients more amenable to a plan of

treatment which involves generous diet, than to one which enforces starvation and depletion.

Whatever be the motive, gentlemen, which actuates Irish surgeons in advocating this plan of treatment, there is one of which their history must hold them acquitted—pusillanimity. In a country where, within these past few years, the common iliac has been tied by Hargrave, the innominate laid bare by Porter, the abdominal aorta by Stokes, there must exist potent reasons for inducing such surgeons to prefer compression to deligation of the femoral artery. Irish surgeons may dare much in their operative proceedings, but one thing they must not do—submit a patient to a dangerous operation when they have at hand a procedure at once so simple, so effectual, so free from risk, as that to which I have so feebly drawn your attention this day.

TREATMENT OF HÆMORRHAGE ARISING FROM RETENTION OF THE SECUNDINES AFTER ABORTION.*

By J. G. SWAYNE, M.D.,

Physician-Accoucheur to the Bristol General Hospital, and Lecturer in Midwifery at the Bristol Medical School.

AN abortion about the middle of utero-gestation may become one of the most troublesome, difficult, and dangerous cases which can fall to the lot of the accoucheur. The reason is, that at this time it is peculiarly liable to be complicated with retention of the secundines. During the first two months of pregnancy, the aborted ovum is usually cast off entire, and there is seldom any further trouble. During the last three or four months, the membranes generally are ruptured, and the foetus and placenta expelled separately; but the latter is sufficiently bulky to stimulate the uterus to expel it; and, even if this should not happen, the uterus is large enough to admit of the introduction of the hand for the purpose of removing it. During the middle of pregnancy, however, or rather, I should say, during the third, fourth, and fifth months, the ovum is very likely not to be expelled entire: the placenta and membranes are not sufficiently bulky to induce expulsive efforts of the uterus, and are, therefore, very liable to be left behind; and the uterus is not large enough to admit the hand for the purpose of extracting them. Under favourable circumstances, the placenta and membranes may be cast off with, or immediately after, the foetus; but it is quite as usual, I think, to find that this is not the case, and that the secundines, if let alone, may be retained for an indefinite period. For instance, on making an examination, the accoucheur finds the uterus contracted in all its dimensions, and the os uteri tightly encircling the filiform funis, which will inevitably give way if any attempts are made to remove the placenta by its means. In fact, circular contraction of the fibres of the os uteri internum, or what is commonly called hour-glass contraction of the uterus, is a much more frequent occurrence after abortion than after labour at the full term, and is accompanied with similar dangers, although in a minor degree. As long as the placenta and membranes remain behind in the uterus, the patient is subject to attacks of hæmorrhage, which may be very frequent and very profuse; or she is liable at a later period to septicæmia from the absorption of putrid matter caused by the decomposition of the retained secundines.

To prevent such untoward results, the obvious indication is, of course, to remove the exciting cause; but this is a matter of so much difficulty in practice, that obstetric authorities have for a long time been divided in opinion as to the advisability of attempting it. The older authorities—for instance, Denman, Davis, Dewees, Burns, Ingleby, and Blundell—are in favour of the expectant plan, and disapprove of manual attempts to extract the placenta. Denman, who always relied so implicitly on the *vis medicatrix nature*, is especially opposed to manual interference, and at the same time very much underrates the risk arising from retention of the secundines, for he goes so far as to say, "Much less mischief may be expected from the retention of a putrid placenta than from attempts to force it away by the medicines usually given, or by manual assistance." I have myself in many instances tried the expectant plan of treatment, and can by no means give a favourable report of its results. As long as the placenta remains in the uterus, the patient is liable to sudden and alarming attacks of hæmorrhage; and so greatly am I impressed with the danger of this occurrence, that during the first three or four days after an abortion I would not on any account leave a patient with the placenta in the uterus, unless I had previously guarded against this accident by plugging the vagina. In all cases of miscar-

* Read before the Medical Section at the Annual Meeting of the British Medical Association, in Plymouth, August 1871.

riage accompanied with much hæmorrhage, the plug is a most valuable remedy, and may always be employed when the placenta cannot be extracted. It is a very safe remedy also, when certain precautions are taken. These are, to watch carefully that it does not occasion accumulations of blood, or retention of putrid matter, in the uterus. To fulfil the first indication, firm counterpressure should be made over the fundus uteri, so as to prevent the expansion of that organ. This is unnecessary during the first three months of pregnancy, as the uterus is too small to hold much blood; but during the fourth, and especially the fifth month, it becomes necessary, because the uterus is then capable of containing a considerable amount. I once attended a woman who miscarried during the fifth month, and who nearly died from internal hæmorrhage into the uterus, although the vagina had been plugged, and there was not the slightest escape of blood externally. She had lost a large amount of blood previously, and the quantity which then escaped into the uterus was nearly enough to turn the scale against her. Her case so impressed the danger of internal hæmorrhage on my mind, that I now never use the plug in the fourth or fifth months of pregnancy without applying over the fundus uteri a large cup-shaped piece of padded metal made for that purpose, and just adapted to the size of the organ. This is secured in its place by a strap and buckles, and over all an abdominal bandage. To fulfil the second indication—viz., to obviate the danger of collections of putrid matter in the uterus—the plug should be removed frequently, and reapplied if necessary. As a general rule, it is well not to let a plug remain *in situ* more than twelve hours. By far the most efficient method of plugging is to introduce into the os uteri a tent of compressed sponge before plugging the vagina. This not only prevents all escape of blood from the uterus, but most effectually dilates the cervix, and facilitates the extrusion of the placenta. The vagina should then be plugged; and for this purpose I generally prefer an old silk handkerchief, which has been previously torn into two or three long strips, and well oiled. It is much more convenient to introduce the plug through a full-sized tubular speculum. When the plug is pushed up by the fingers without using a speculum, the operation is much more tedious and painful. The plug should be removed after an interval of about twelve hours; and it is a good plan to administer a full dose of ergot about two hours previously. The result of this will probably be that, on removing the plug, the retained placenta will come away also; the stimulus of the plug and the ergot having induced expulsive action of the uterus. But yet, in many other cases, the action of ergot is very uncertain, and one's hopes are doomed to disappointment.

If the placenta does not come away, plugging may be continued for two or three days, if there be much danger of hæmorrhage, but if this is not the case, it is better not to persevere with it so long. When putrefaction of the secundines has come on, and the vaginal discharge has become very offensive, the plug should be taken away; and this is above all necessary if fever and constitutional irritation have set in. The plug, by confining putrid discharges within the uterus, renders the danger of absorption more imminent. To obviate this danger the vagina and even the uterus should be syringed out twice or three times a-day with warm water and antiseptic lotions, and this should be done quite as much with the view of detaching the placenta as of neutralising and washing away the putrid discharges. An ordinary Higginson's syringe with an elastic tube is the best instrument for washing out the vagina, and the nurse or other attendant may be directed to throw up about a pint of fluid each time. To syringe out the uterus, however, requires much more care and caution, as it is a proceeding by no means free from risk. I have seen very alarming symptoms, such as sudden acute abdominal pain, dyspnoea, and great prostration produced by injections into the uterus, especially when the fluid has been thrown up too forcibly and in too great quantity; and there is no doubt that in this way, not only some of the injection, but even some of the putrid uterine contents may be forced through the tubes into the abdominal cavity. On this account no more fluid should be injected than the uterus can easily contain; and the tube used for the purpose should not be so large as to prevent a free escape of the fluid by the side of it through the os uteri as soon as the uterine cavity is filled.

A small India-rubber bottle, to which an elastic catheter has been adapted, will be much better for uterine injection than a Higginson's syringe. I need scarcely say that this operation should not be entrusted to a nurse. Besides antiseptic lotions, astringents and styptics may be injected in the manner just described whenever hæmorrhage comes on after plugging has been discontinued. For this purpose an injection consisting of four ounces of the liq. ferri perchlorid. fortior of the *British Pharmacopœia* with twelve ounces of water, as recommended by Dr. Barnes, will be found very serviceable. I am in the habit of using a lotion consisting of one part of Bird's styptic (a peroxide of sulphate of iron and alumina) with four parts of water, and I prefer it to any other.

Besides these local means for checking hæmorrhage cold may be applied, and ergot of rye administered, together with various astringents. The recumbent posture should be strictly enjoined.

It must be confessed, however, by all who have had much experience of these cases, that the expectant treatment is very unsatisfactory; and that, in spite of plugging, styptics, and other palliatives, the patient is never safe from hæmorrhage, septicæmia, and other less dangerous consequences, so long as the *fons et origo mali* in the shape of the whole or any portion of the secundines is left behind in the uterus. She may suffer for weeks from severe hæmorrhages, frequent rigors, constant foetid vaginal discharges, hectic fever, night sweats, great prostration of strength, tenderness and swelling of the abdomen, and complete loss of appetite; and these symptoms may go on to a fatal termination* unless the putrefying portions of retained placenta are either expelled naturally or removed by art. On this account most obstetric authorities in the present day have abandoned the expectant plan and are in favour of active interference.

In 1861 Mr. Priestley communicated to the Obstetrical Society of London an excellent paper on "the Treatment of Cases of Abortion in which the Placenta and Membranes are retained." In the discussion which followed, the weight of opinion in the Society was decidedly in favour of manual interference: Dr. Priestley, Dr. Hall Davis, Dr. Tyler Smith, and Dr. Tanner, all strongly advocating this plan of treatment, in which opinion I myself fully concur.

The propriety of manual interference being decided in the affirmative, the next question will be as to the best method of effecting it. Most authors maintain that the safest means is by the hand alone, and condemn (without, as I think, sufficient reason) the use of any kind of instrument for this purpose. As I remarked before, the uterus at this period of gestation will not admit the entire hand, and the most that we can do is to introduce the hand into the vagina so as to pass the fore and middle fingers into the uterus. Any attempts to extract a retained placenta, by two fingers, in the vagina only, will almost certainly be futile. Under the most favourable circumstances, the tips of the fingers may thus be able to touch the placenta just within the os uteri, but have little or no power to bring it down, and, in all probability, it will again and again elude their grasp. It becomes necessary, then, to introduce the whole hand into the vagina. But this is always a very painful operation at this period, even in a multipara, and in a primipara is accompanied also with considerable difficulty, and not free from danger. It is, therefore, always best to place the patient first under the influence of chloroform, as much for the purpose of relaxing their tissues as of abolishing pain. The *modus operandi* is thus described by Dr. Priestley: "Whilst the woman lies on her back, with the thighs flexed upon the abdomen, I have introduced one hand into the vagina, the other hand being placed over the fundus uteri, externally, to steady and depress it. If the os uteri was closed, it was gradually dilated by passing first the forefinger into the orifice, and then the second, with as little force as possible. With time and caution, the os uteri gives way to gentle pressure, and the introduction of the finger is in most cases not difficult. When the placenta is reached, it is separated in the ordinary way, and pushed downwards towards the palm of the hand, until it is partially or wholly beyond the os uteri. It is important, certainly, to ascertain that the placenta and membranes are entirely loosened from their attachments, and quite movable in the uterine cavity before the retraction of the hand, so that a second introduction of the fingers is not needed." Dr. Priestley further remarks: "In scarcely any case can it be necessary to introduce more of the hand into the uterus than the first two fingers—one may occasionally answer the purpose, but it works at great disadvantage alone, both in separating and extracting the placenta. The two fingers together constitute the best form of forceps for seizing what it is intended to withdraw, and are the most serviceable in all respects." With respect to the time that ought to elapse after the birth of the foetus, before the placenta should be extracted, Dr. Priestley is inclined to suggest that six hours may be fixed as an approximative limit, unless hæmorrhage have occurred to any extent during the interval. In such a case their removal should be effected earlier.

As far as my own experience goes, I cannot bear out the statements which have been made as to the efficiency of two fingers, either in dilating the os uteri, or extracting the placenta and membranes; I have several times failed, especially when the placenta has been at all adherent, in effecting these objects. This I attribute to the small powers of abduction and adduction which the fingers possess, even under ordinary circumstances. It is surprising how little power there is of grasping anything between the distal phalanges of the two first fingers, compared to

* In the BRITISH MEDICAL JOURNAL for December 1853, Mr. Humphreys of Shrewsbury related a case of fatal flooding from retention of a piece of placenta only the size of a shilling.

that which is possessed by the forefinger and thumb. To test the relative powers of each, I have tried what amount of weight I could raise by the forefinger and thumb only, used as a forceps, and by the two first fingers. I found that, while I could raise twenty-eight pounds by the former, I could not raise more than four pounds by the latter. The reason, no doubt, for this great difference in power is, that when anything is grasped between the points of the thumb and forefinger, it is held by means of the flexor muscles; whereas, when it is grasped between the points of the fore and middle finger, it is held solely by the adductor muscles, which are much weaker and act much less advantageously. To show how little power the two first fingers have of grasping anything between them, let any one place the handle of an ordinary dining-room poker between their two distal phalanges, and he will find it no easy matter to lift it off the ground. One can readily understand that these two fingers, enclosed in a contracting uterus, would form but a very inefficient forceps.

On this account I have endeavoured to supply the deficient powers of abduction and adduction possessed by the fingers by means of a modification of the ordinary forceps which is used for extraction of the ovum. The extremities of the instrument form an obtuse angle, with the shanks so as to correspond with the angle formed by the axis of the uterus with that of the vagina. The extremities are fenestrated, and resemble in shape the blades of an ordinary obstetric forceps in miniature, except that they are more hollowed on their inner surface, so as to fit with tolerable accuracy over the forefinger of the left hand when it is placed between them for the purpose of introduction. Attached to the handles is a screw by means of which they can be powerfully separated when necessary. The instrument may thus be made a most efficient agent in dilating the os uteri.

The cases most adapted for the use of this forceps are those in the os uteri which will just admit the last phalanx of the index finger, and where the detached placenta can just be felt at the os uteri internum, but is found to be retained in that position by the contraction of the circular fibres of the os uteri. The forefinger of the left hand enclosed between the blades of the forceps, but with the tip advanced a little beyond them, should be passed through the os uteri until it touches the placenta. The blades of the instrument should then be passed in a little beyond the finger, and separated very slowly by the screw until the contraction of the circular fibres is gradually overcome. The placenta will then probably be extended until it can be grasped by the blades of the forceps, and if the cord is unbroken, this process may be facilitated by a little gentle traction upon it. In order to grasp the placenta, the screw must be turned in a reversed direction until the handles can be brought together.

Much has been said about the danger of passing instruments of this kind into the uterus beyond the guidance and protection of the fingers. I can readily understand that, with such an instrument as the wire crotchet of Dr. Dewees, it would not be difficult to injure the inner surface of the uterus when groping about for a retained placenta; but I cannot see how it would be possible to grasp any portion of the uterus with such a forceps as I have described when used with ordinary care; and the blades are so smooth and rounded externally, that they would not be likely to inflict injury in any other way. For my own part, I should not hesitate to employ this forceps, even when the placenta is still adherent to the fundus uteri. The advantages it possesses are that it dilates the os, and grasps the secundines better than the fingers, and that it renders the introduction of the entire hand into the vagina unnecessary.

CONSTIPATION ATTENDING THE USE OF IRON. To obviate the constipation liable to attend the use of iron, M. Béhier recommends a centigramme of powdered belladonna to be taken with ten centigrammes of sugar before meals—the dose of iron being taken with the meal. If, however, the belladonna produce disturbance of vision or dryness of the throat, the dose must be diminished; or a mild laxative may be given occasionally.—*Journal de Méd. et de Chir. Pratiques*, July 1871.

TREATMENT OF BURNS. M. de Bruyne recommends the following in cases of burns in place of the Carron oil and similar applications: fresh hydrate of lime, 3 grammes; glycerine, 150 grammes; chlorinated chlorhydric ether, 3 grammes. The mixture is transparent and uniform, and is applied to the injured part by means of a piece of fine linen, over which may be laid oiled-silk or other material to prevent evaporation. M. de Bruyne says that the treatment is equally applicable in cases of burn unattended with sloughing, and in those where sloughing has occurred and the eschars have fallen off. He believes that it will also be found useful in ill-conditioned wounds, and in tonic, callous, fungous, and foul ulcers. The quantity of the anæsthetic or of the lime may be varied according to circumstances.—*Journal de Bruxelles et Lyon Médical*, July 23.

REPORT OF THE JOINT COMMITTEE OF THE BRITISH MEDICAL AND SOCIAL SCIENCE ASSOCIATIONS.

THE following report was read at the annual meeting of the British Medical Association at Plymouth, August 1871.

1. The whole of the oral evidence taken by the Royal Sanitary Commission having been now published, and their Report thereon, as well as on other documentary evidence (not yet published), having been carefully examined by us, we beg leave to offer the following remarks on the Report in general, and on certain portions thereof in particular.

2. We feel bound to express our views, because the Royal Sanitary Commission may be said to owe its existence mainly to our efforts, it having been appointed in compliance with a request, submitted on May 22nd, 1868, to Her Majesty's Ministers by a deputation from the above mentioned Associations, called together by us, introduced by Mr. George Clive, then M.P. for Herefordshire, and accompanied by several other members of Parliament.

3. But before entering upon a critical examination of some features of the Report, we desire to express our gratitude to the members of the Commission for the vast amount of labour and thought which they have devoted to this important inquiry, and our conviction of the general excellence of the work which they have now completed.

4. In their history of sanitary laws up to the present time—in their general observations on the subject of public health—in their exposition of some causes of present imperfection in sanitary administration—in their full appreciation of those injurious and morbid conditions of social life which tend to sap the vigour and destroy the health of the masses of our population—in their able summary of existing laws—and in many of their practical recommendations, especially those relating to the consolidation of law—we gladly recognise the value of their exertions, and the benefit they are likely to confer on the public by their prolonged investigation.

5. Having thus expressed a general opinion, we feel obliged to proceed to the far less agreeable task of pointing out certain primary defects in the method and scope of inquiry, and certain errors of conclusion which have naturally resulted from those defects.

6. The memorial which we presented to the Government in 1868 contains the following request:—"For all these reasons, and for others set forth in the accompanying 'Memorandum,' we ask for a thorough, impartial, and comprehensive inquiry, by a Royal Commission having power to visit, or to send Sub-Commissioners to visit, the large towns and other districts of the country, to obtain information and evidence, and to report on: 1. The manner in which the cases and causes of sickness and of death are and should be inquired into and recorded in the United Kingdom.—2. The manner in which coroner's inquests and other medico-legal inquiries are and ought to be conducted, particularly in regard to the methods of taking scientific evidence.—3. The operation and administration of sanitary laws, with special reference to the manner in which scientific and medical advice and aid in the prevention of disease are and should be afforded; and also with special reference to the extent of the areas or districts most convenient for sanitary and medico-legal purposes.—4. The sanitary organisation, existing and required, including a complete account of the several authorities and officers. The education, selection, qualification, duties, powers, tenure, and remuneration of the said officers to be specially reported on.—5. The revision and consolidation of the sanitary laws, having special reference to the increase of the efficiency of their administration both central and local." Into four of these subjects the Commission was expressly instructed to inquire, and to report thereon.

7. We observe with satisfaction that the Commission, like ourselves, "much regret that Scotland and Ireland were not included in the terms of the present, as well as of the former, Commission" (Memorandum, vol. ii, p. 360); but, admitting that the objections to the limitation of this inquiry to the provinces of England—objections which were submitted in a second memorial, dated July 1869—have been partially removed by the examination of eminent witnesses from the metropolis, from Scotland, and from Ireland, we beg to point out that the more important defect was further noticed in the last mentioned memorial, in the following terms:—"That no information obtained merely by written answers to schedules of questions, always open to grave misconception of their scope and import, and addressed exclusively to local authorities, can, in the absence of personal inquiry, either by the Commission itself or by skilled persons deputed to discharge its functions, furnish a trustworthy basis for permanent legislation. That as, sooner or later, recourse must be had in many places to inquiry on the spot, in order to supplement the tabular returns, as well as to test their accu-