A Lecture ON THE PREVENTION OF DIFFICULT LABOUR.

DELIVERED AT THE MEDICAL GRADUATES' COLLEGE
AND POLYCLINIC.

By G. E. HERMAN, M.B.LOND., F.R.C.P.,
CONSULTING OBSTETRIC PHYSICIAN, LONDON HOSPITAL.

My subject is the prevention of difficult labour. There has always been loss of life in child-bearing, and it has been the constant effort of the medical profession to reduce this.

MORTALITY OF CHILDBIRTH.

Before the days of asepsis this mortality was considerable, but there has not been a rapid improvement in this respect. Still there is some improvement. Dr. Boxall, writing in 1893, and Dr. Cullingworth, in his address as President of the Obstetrical Society of London in 1897, called attention to the high puerperal septic mortality, in spite of the power of antiseptics in preventing it. There is a little improvement, for I find that the death-rate in ten years from 1892-1902 from septic infection was 4.91 per 1,000, whereas the death-rate from the same class of illness during 1903 was only 4.01 per 1,000. This indicates an improvement of nearly 1 per 1,000. This death-rate is much higher than it ought to be.

The improvement which is being noticed in the figures is due to the numbers of young men who are turned out from the medical schools with the antiseptic ritual at their fingers' ends as it were, men who have been thoroughly taught it and who are accustomed to do almost automatically what is required to maintain asepsis by antiseptics. But there are still medical men in the country who, because they have attended so many thousands of cases without antiseptics, and have had in their experience few deaths, think that antiseptics are unnecessary in childbirth. There are a large number of women who do not consult their doctor as to the choice of a nurse to attend them in their confinement. And the doctor may be perfect in his antiseptic precautions, and yet the nurse may not be. Then there are a number of poor women who are attended by untaught and dirty midwives. In these three ways we may account for a large part of the infection which occurs in these cases. It must be confessed, unfortunately, that septic infection is still answerable for the bulk of the puerperal deaths. I do not want to go into the details of antiseptics, because the principles are the same as those which are applicable to surgery in general. I would only insist here that at the present time septic infection is still the most common cause of death in the puerperium, and it is a cause of death which is capable of absolute prevention.

The next class of fatalities are those which arise from disproportion between the dimensions of the child and those of the pelvis. These include cases in which either the child is large with a normal-sized pelvis, or in which with a contracted pelvis the child is either normal in size or large. Disproportion is apt to lead to death in various ways. Death may occur by mechanical difficulty in delivery, sometimes by occasioning malpresentations. This class of death ought to be prevented. There are deaths from haemorrhage, and these with few exceptions ought to be prevented.

There are some causes of death in connexion with pregnancy and the puerperium of which we know so little that they cannot at present be prevented. The chief of these is eclampsia, a disease which we cannot predict or prevent. There is good reason for believing that it is due to a poison, and a good deal has been written about the toxæmia in eclampsia, but we are absolutely without information as to what that poison is, what its properties are, whence it comes, or how it can be avoided. Some people believe the disease can be prevented by examining the urine of women in pregnancy to see if it contains albumin. But many women who are pregnant and have albumin in the urine have no signs of eclampsia, and the

albuminuria passes off in a week after delivery. We naturally suppose that when a patient has one disease of the kidney she is likely to get other morbid conditions of kidney also, but that is rather a supposition based upon general principles than a fact which has been proved by experience of this particular disease. The fact that there is no albumin in the urine of a pregnant woman has been found to be no guarantee against her getting eclampsia. In one case the urine of a pregnant woman was examined three hours before an eclamptic seizure came on, and it was found to be free from albumin, so that it is not safe to say that the absence of albumin in the urine before delivery makes it certain that there will not be eclampsia. Our inability to predict this disease, and our lack of knowledge as to its cause, makes it a disease at present outside our control.

There is another rare class of cases also beyond our control, cases of rupture of the uterus in easy labour. A child has been born in its membranes, and yet the uterus has ruptured, by the exertion of a force which was not sufficient to rupture the membranes. This must be due to some degenerative change in the muscular fibres, but we have not yet discovered what it is, nor can we identify it during life. So here again we must say that rupture of the uterus in easy labour is one of the things which we cannot predict or prevent.

Acute yellow atrophy of the liver is so much more liable to come on during pregnancy than at other times that it may be considered a disease of pregnancy, and this again we cannot predict or prevent. These are some of the conditions in regard to which, therefore, we cannot yet hope to reduce the mortality from childbirth.

To prevent accidents and deaths from mechanical disproportion it is necessary that the patient should be examined during pregnancy. That is the first proposition that I want to submit to you: that when a medical man is engaged to attend a pregnant woman he ought to insist upon examining her not later than the seventh month of pregnancy, because abnormal size of the child and contraction of the pelvis, which are the cause of these accidents, can generally be recognized if examination is made by the end of the seventh month, and can be more easily remedied at that time than later on in the pregnancy. Remember what a natural labour is. A normal labour simply consists of the stretching open of the muscles and fasciae which bound the vagina and vulva. In a natural labour—that is, one in which the pelvis is of an average size and so is the child—there is no hindrance whatever offered to delivery by the pelvic bones. Think of what the pelvic measurements are and you will see that it is so. The biparietal diameter of the child's head generally lies in the oblique diameter of the pelvis. Its average length is 3½ in. The average oblique diameter of the pelvis is 4½ in., so that there is plenty of room for that. The measurement of the child's head, which lies in the conjugate diameter, is one from in front of one parietal eminence to behind the opposite one, and measures 4 in., while the conjugate measures 4½ in., so that there is plenty of room for that. The measurement of the child which stretches the pelvic outlet is the suboccipito-frontal. From the nape of the neck to the most distant point of the frontal suture is 3½ in., and the distance from the pubes to the tip of the sacrum is 4½ in.; so the only way in which the bones are affected is the extension of the coccyx, which is movable.

The whole work of labour consists in stretching open the muscles and fascia which bound the vagina and vulva, and the time required depends on the power of the uterine muscle and the power of the auxiliary muscles. The latter have little to do with it, because they do not act notably until the later stages of delivery—that is, until the parts which are richly supplied by sensitive nerves are pressed upon. In different women the difference in the resistance which these structures offer to being stretched is slight. But there are differences. It has been found that labour lasts a little longer in elderly than in younger primiparae, but the difference is slight, not more than an hour or two. And recollect another thing, that the stretching open of the soft parts will always take place. When the labour is normal and the exit is not obstructed by bony obstruction or by tumours, the child will always be expelled. A condition has been described known as missed labour, in which it is said labour has come on and passed off without the child being

expelled. The cases which have led to belief in such a condition are, first of all, as Robert Barnes pointed out, that a dead child may be retained *in utero* for an almost indefinite time without labour coming on. But that is a different matter from a healthy living child remaining there. There have been some cases in which the delivery of the child has been obstructed, and its exit made impossible by tumours: the pains have gone off and the child has been retained. But these are not cases of natural labour. In natural labour, without bony or other obstruction, the uterus will always complete labour, and that without grave injury to the mother. When a labour lasts longer than usual it is either because the pains are weak, or because the child is large, or because the pelvis is small.

NORMAL PREGNANCY AND THE MARGIN OF SAFETY.

The relative sizes of the child and pelvis ought to be found out by the doctor during pregnancy. This examination should be made at the seventh month of pregnancy. If the patient wishes to be examined before the seventh month of pregnancy there is no reason why she should not. But there is no object in insisting upon examination before the seventh month. At that time you can judge whether she has a pelvis so small as not to permit a normal-sized child passing through it. In cases where the pelvis is too small to permit a living child to be born, it is best to let the mother go to full term and then be delivered by Caesarean section. This course may not commend itself to the patient: she may wish to have miscarriage induced earlier. I think that is not good practice. If you wait until the end of the seventh month you can then tell her that the time has gone by at which it would be possible to procure miscarriage, so it does not come into discussion.

Supposing the patient comes for examination at the end of the seventh month of pregnancy, you need to examine her to find out the position of the child, its size, and the size of the pelvis. All these things can be ascertained by abdominal examination. The patient should be lying upon her back, and be propped up by pillows at such an inclination that the long axis of her trunk is at about 45° with the horizon. In that position the long axis of the uterus is nearly vertical and nearly perpendicular to the pelvic brim. Posture makes some difference to the ease with which the child's head gets engaged in the pelvis. When the patient is lying flat on her back and you try to push the head into the pelvic brim you sometimes fail to do so, while if you have the patient at the inclination I have mentioned you can do so easily. If you keep the patient in that position you will often find that the head will spontaneously sink into the pelvic brim. The best position for the doctor is for him to be sitting by the side of the patient and facing her feet. There are plenty of ways, variously denominated, in which the hands may be made to grasp the child and ascertain its position. In my judgement, the best way is to sit by the side of the patient, facing her feet, and put one hand on each side of the abdomen, low down, just over the pelvic inlet. If the child is lying in a natural position, you will be able to feel the head between the tips of your fingers, and by moving the fingers upwards you will be able to feel where the neck is, and higher up you will feel the little movable knobs which indicate the fetal limbs. If the patient is not too fat, and if she does not hold her abdominal muscles rigid, you will be able to ascertain the position of the child. If she makes her muscles rigid, you will have to prolong the examination until she gets confidence and ceases to contract her muscles. When the abdominal walls are very fat, you may fail to make out the position of the child.

Remember that the great majority of children are about the average weight and size. In most pregnant women the girth of the abdomen at the level of the umbilicus at full term is under 36 in., and the length of the uterus measured from the symphysis pubis over the convexity to the top of the uterus is 13 in. If in the patient who is seven months pregnant the measurements are not as great as these, it is clear that the child is not of abnormal size; but if they are as great as this, either the child is of excessive size or the size of the abdomen is increased by some other cause, which has to be found out. The measurements may be increased by dropsy of the amnion. This dropsy will cause fluctuation, and you can move the

child about easily either by vaginal examination or by the hands externally. Dropsy of the amnion is not, as a rule, difficult to diagnose. The cases in which dropsy of the amnion is difficult of diagnosis are those of twins, in which one of the amnions is dropsical and the other not. Sometimes there is difficulty in distinguishing between twin pregnancy with dropsy of one amnion and pregnancy with ovarian tumour. Dropsy of the amnion may lead to considerable increase in the size of the abdomen, and sometimes comes on rapidly. If at seven months you find sufficient amniotic fluid to cause fluctuation, the patient must be watched carefully. The measurements may be increased by fat. It is not difficult to find out that there is excessive fat, because you can pinch it up and judge of the quantity. It is not common for women at the child-bearing age to be very fat, but now and then you get a patient who is very fat, and it may be difficult to say how much of the great size of the abdomen is due to fat and how much to the size of the child. The size of the abdomen may be increased by tumours, ovarian, fibroid, or other. These accidental conditions may make it difficult rightly to infer that because the abdomen is larger than it ought to be therefore the enlargement is due to a large child. But, although these difficulties present themselves in some cases, they do not in all, nor in many; in most cases you can distinguish that the size of the abdomen is due to the large size of the child, and not to anything else. If at the end of the seventh month the child is of natural size, then the patient should be told to come at the eighth month to be examined, so that you may be able to determine the child's size then. If the dimensions are not then found to be excessive, the woman may be allowed to go to term. You also want to know not only the size of the child, but the size of the pelvis: not the absolute measurements, but the relation of the pelvic measurement to the size of the child, because it does not matter about the patient having a small pelvis if the child also is small, nor that the child is large if the pelvis also is large. Ascertaining the absolute size of the pelvis in pregnancy is a thing which cannot be done without causing the patient so much suffering that if you try to do it she will be loth to allow you to try again. You can only obtain the diagonal conjugate. This in the ordinary pelvis measures 4½ in.; if you press hard enough you can feel the promontory of the sacrum in most women; but the finger is only about 3 in. long, and if you get near the promontory, so much pain is caused by the knuckles pressing up the perineum that the patient will probably object. What you have to ascertain being the relative size of the pelvis and the child, it does not help you to ascertain the absolute dimensions. The great point is to find the ease or difficulty with which the head will sink into the pelvis or with which it can be pressed into it. If the head easily sinks into the pelvis or can be easily pressed into it, the child will pass, whatever the absolute size is. If there is malpresentation and the child is lying transversely or obliquely, or with the ventral surface instead of the dorsal surface in front, or if the face is presenting, the relative size of the child and the pelvis should be ascertained with great care.

Most of these matters can be easily rectified, and the ease of rectification depends very much on two things. It depends first on the amount of liquor amnii, and next on the amount of time which is given to it. When the child is lying with the limbs in front and the back behind, if you will take plenty of time it is not difficult to turn the back to the front, and it will save the patient a great deal of trouble in labour if you do it. If the child is lying obliquely, so that the head is in the iliac fossa, it is not difficult to press the head over the pelvic brim. If the child is lying with the breech presenting and the head at the top of the pelvis, it may be difficult, the difficulty depending on the amount of liquor amnii. The power of ascertaining the position of the child and of correcting anything which is wrong, and ascertaining the relative size of the head and the pelvis, are sufficient reasons for advising the patient to be examined at the seventh month of pregnancy. I would lay this down as a rule—that mechanical difficulty in labour implies that the patient has been advised by incompetent persons, not necessarily by an incompetent medical man. Women do not usually take the advice of medical men as implicitly as they

ought. If the patient comes at the seventh month, causes of difficulty can be observed and can most likely be remedied. If she does not come, that means that she has been badly advised by some one.

PREMATURE LABOUR.

I have pointed out that the head, in a natural labour, passes through the pelvis without being hindered by the pelvic bones; and I have asked you to observe that there is a large margin of safety when the child is not more than the average size and the pelvis is of quite average size. I have seen a child of average weight come through a pelvis with the face presenting and one hand prolapsed, and I have seen a child of average size born alive by spontaneous evolution. These things show what a large margin of safety there is in natural labour. But although there is a large margin in most cases, sometimes the margin will be overstepped, and in that case there will be a difficult labour. If by examining the patient during pregnancy we have found that at the seventh month, or it may be at the eighth month of pregnancy the child has reached more than the full average size, the proper course is to prevent a difficult labour by inducing premature labour. Some people will say this is meddling with midwifery, and therefore it is bad. But why is it bad? It is not bad for the child, because by the terms of the case we have supposed that it has reached full average dimensions, it weighs at least 7 lb., and makes the mother's abdomen as large as that of a woman at full term. It is not only quite as able to take care of itself as an average child, but its premature birth is better for it, because it would probably be injured by difficult labour at term if this were allowed to take place. Therefore, so far from being an obstacle to the well-being of the child, it is a course which is for its benefit. It may be objected that it subjects the mother to additional risk, that the risk is greater than that of the labour which comes on at full term. So it is if the labour is badly managed. If the nurse or accoucheur is one who cannot go to the patient without exposing her to the risk of septic infection, she is better left alone; but if the labour is conducted with every precaution for securing antiseptis, I cannot conceive of any way in which the premature labour is more difficult or dangerous than labour at full term. In preparatory labour at full term the opening up of the cervical canal, so that it comes to form part of the uterine cavity, has come about naturally; but if you bring on labour prematurely, this has not taken place, and the labour is long, for both the internal and the external os have to be opened up, and if the accoucheur does not bear this in mind and is in a hurry, the patient will be exposed to risk to which she would not have been exposed if the pregnancy had gone on to the full term; but if the labour is properly conducted and the uterus allowed to do its own work, I can see no way in which premature delivery is more dangerous than delivery at term. It is less so in the sort of case which we are discussing now, in which the child is already as big as an average child. Delivery takes longer than at term, and therefore we must allow that it may be perhaps less satisfactory to the mother and to the doctor. But against that may be set the fact that the date can be pre-arranged, which is a convenience both to the doctor and the patient, and I think an effective set-off to the slightly longer labour. The best method of bringing on premature labour is by introducing a bougie between the membranes and the uterine wall, and then leaving the case as much as possible to Nature. The bougie does not require to be tied in, but pushed up as far as it will go. In most cases labour pains will begin from twelve to twenty-four hours afterwards. Sometimes a bougie will fail. There are some patients whose uteri seem to be so little irritable that it seems possible to do almost anything to them without delivery following. If the bougie has been left in from twenty-four to forty-eight hours without result, I think the best plan is to dilate the cervix with Hegar's dilators till the cervix is big enough to enable you to introduce Champetier de Ribes's bag. I have not known a uterus fail to respond to that bag. All these things must be done with the strictest care in regard to antiseptis. One sometimes reads of cases of labour in which there was no mechanical disproportion and yet the patient was getting exhausted. But in natural labour, that is, in a labour in which the child and the pelvis of the mother

are of average size, exhaustion never occurs. A patient may be tired, but not exhausted. By exhaustion I mean a condition which renders the patient in danger of death, as is seen in cases of neglected transverse presentations, or contraction of pelvis, in which if the labour is allowed to go on the patient may die. The uterus may get tired in natural labour, the pains pass off, and the patient may go to sleep. Afterwards the nervous system will be refreshed and the pains will come on again. Not only may the woman get tired, but the doctor and the nurse may get very tired if the pains are weak and the labour is long. When the pains are regular but weak, their defect being in their lack of strength, and nothing else, it is good practice to help those weak labour pains by means of forceps. This is the great use of forceps. These cases are more frequent than any in which there is mechanical disproportion. When a patient is getting exhausted from obstructed labour, the proper treatment is craniotomy, and not Caesarean section. There are schools in which it is taught that craniotomy ought to be eliminated altogether, and that in every case of obstructed labour Caesarean section should be the remedy. There is much to be said in favour of that if the cause of the obstruction is found out early. If you know at the beginning of labour, or before labour has come on, that the pelvis is deformed, or that the child is of excessive size, and Caesarean section can be performed early, then the risk from Caesarean section is not greater than that of most abdominal sections. But Caesarean section on a patient who is exhausted by many hours of obstructed labour is very dangerous, and therefore I think delivery by perforation is the proper course. By ascertaining the size of the child, and the position of the child during pregnancy, and rectifying malpositions and malpresentations, we can save the patient from the dangers of mechanical disproportion, and the difficulties of labour which spring from it.

HAEMORRHAGE.

Puerperal haemorrhages are of three kinds:

I. *Accidental Haemorrhage*.—I know no disease in which it is more difficult to get a correct impression by means of figures than in accidental haemorrhage, because cases of slight accidental haemorrhage are common, whereas cases of great, dangerous accidental haemorrhage are rare. Any enumeration of a large number of slight cases of accidental haemorrhages will give good results. We know not enough about the causes of accidental haemorrhage to be able to predict or to prevent it, and therefore we know nothing of value about it. The test of our knowledge of disease is the power to predict and prevent it. We shall never know enough about it except by the practice of examining women during pregnancy. If that were done it is possible such examination might lead to the discernment of some state of the body which preceded accidental haemorrhage, and then we might be able to predict or prevent it. At present we have not that power, and I do not see how it can be obtained except by the systematic study of patients examined during pregnancy. It may be that cases of severe haemorrhage begin with slight bleeding. If we could foresee a case of great accidental haemorrhage, or even if great accidental haemorrhage has taken place, if the patient be not moribund I think the best treatment is by Caesarean section. This has been successfully performed in such cases, and has the advantage that by Caesarean section the haemorrhage is surely stopped, and the patient can be revived, unless she is already moribund, by pouring saline solution into the peritoneal cavity, or by injecting it into the cellular tissue. But I fear that if Caesarean section were accepted as the proper thing to do in all cases of accidental haemorrhage, the mortality might be greater than the mortality from the disease.

II. *Placenta praevia* is another cause of haemorrhage. Here there has been a great improvement in the results, owing to the teaching of Dr. Braxton Hicks and the discoveries of Lord Lister. When I first began to learn midwifery, the mortality from placenta praevia was about 20 per cent. Then came the application of Dr. Braxton Hicks's treatment and of antiseptics, and the mortality was brought down to 5 per cent. And in a collection of cases treated by Champetier de Ribes's bag, made by Dr. Richard Warren,¹ the mortality was 3.2 per cent. This shows that placenta praevia can be successfully treated. It has been diagnosed by abdominal examination, but its diagnosis in that way is difficult, and is not likely to be

often done by the general practitioner. Still, it has been done, and we may hope that the cases in which it can be thus detected may become more numerous, for if we can ascertain the presence of placenta praevia before the haemorrhage has begun we shall be in a better position to treat it successfully. In the treatment of placenta praevia the essential thing is that the treatment should be begun before the patient has become exhausted by excessive haemorrhage. If we can secure pressure upon the bleeding points before the patient has been exhausted we shall be able to get her delivered without haemorrhage of any alarming amount.

III. *Post-partum Haemorrhage*.—The prevention of *post-partum* haemorrhage depends upon two things: (1) Upon the avoiding of extraction when the uterus is not acting, and (2) upon the careful emptying of the uterus. There are some medical practitioners who often get cases of *post-partum* haemorrhage. Why is this? The men who often have cases of *post-partum* haemorrhage are those who apply the forceps and pull continually, whether the uterus is acting or not. I used to come across a stock answer in examination papers, based, I think, on the writings of the late Dr. Playfair. Students would say they would "follow down" the uterus with their hands during the second and third stages of labour. I know not how they could do that and tie the umbilical cord, but I am sure it is absolutely unnecessary, for the uterus will take care of itself. There is no necessity for putting the hand on the abdomen during the birth of the child or during the expulsion of the placenta. The uterus will do its own work if it is allowed to.

The great thing to be avoided when using the forceps is pulling with them while the uterus is inactive. Let the uterus expel the child, and let the efforts with the forceps be confined to helping the uterus; never attempt to replace the action of the uterus. The object of putting the hands on the abdomen after the child is born is not to follow down the uterus. If the accoucheur has been careful only to extract the child while the uterus was contracting, the uterus will follow down the child and contract and retract. The object of putting the hand on the abdomen is partly to stimulate the uterus by friction and so accelerate the third stage of labour, but chiefly to ascertain that the third stage of labour is going on properly. The other great cause of *post-partum* haemorrhage is the imperfect emptying of the uterus. If the uterus is left with a bit of placenta or chorion inside it, it will not contract properly. To prevent that, carefully examine the placenta and the membranes to see that the chorion has everywhere come away with the amnion, and that a piece of the placenta has not been broken off. Put the placenta, uterine surface upward, into a basin of water, and then if there is a bit left behind you can perceive it better. Look at the fetal aspect of the placenta, and see if there are vessels running to the edge and there stopping short. If you see this, suspect that a bit of placenta is retained. A little portion separate from the main mass of placenta may be retained, and you may perceive nothing missing from the placenta until you float it in water. If some of the placenta has been left behind it is probable that part of the chorion also has been left, but if the membranes have been much torn it may be difficult to recognize that.

SUMMARY.

Those are the chief accidents which render labour a dangerous process. Septic infection can be prevented by the systematic and thorough following out of antiseptic principles in every case. Mechanical disproportion can be prevented by the examination of the patient at the seventh month, and by bringing about premature labour if the child is large, or if its size relatively to the pelvis is large. We cannot say at present that inducing labour will prevent haemorrhage, but examination during pregnancy seems to be the only thing which may in the future enable us to prevent this haemorrhage. *Post-partum* haemorrhage is to be prevented by taking care that the child or the placenta is not pulled from the uterus when it is not acting, and that nothing is left behind after the third stage of labour. If patients were regularly examined at the seventh month of their pregnancy much might be done in reducing the mortality of childbirth.

REFERENCE.

¹ *Lancet*, February 3rd, 1906.

The Ingleby Lectures

ON

THE MANAGEMENT OF A CASE OF LABOUR.

DELIVERED AT THE UNIVERSITY OF BIRMINGHAM.

By C. E. PURSLOW, M.D., M.R.C.P.,

HONORARY OBSTETRIC OFFICER, QUEEN'S HOSPITAL; INGLEBY LECTURER FOR THE YEAR.

[ABBREVIATED.]

AFTER thanking the Council of the University for the honour conferred upon him, the lecturer gave an account of the life and work of Dr. Ingleby; the latter was Professor of Midwifery at the Queen's College, Birmingham, and the author of a treatise on uterine haemorrhage, which had much repute in its day. The Ingleby Lectures and Scholarship were founded in his memory, and, in the words of the trust deed, "for promoting the advancement of obstetric medicine and surgery, including the diseases of women and children."

EDUCATION OF MEDICAL STUDENTS IN MIDWIFERY.

Dr. Ingleby was a strenuous advocate for the better recognition of midwifery by the authorities in the medical world, and by the examining boards, and for more thorough teaching of the subject, and after quoting Dr. Ingleby's views on this subject, the lecturer proceeded as follows:

Matters have improved as regards the education of the medical student in midwifery since Dr. Ingleby's day, but are still very far from satisfactory; attention was drawn particularly to this by Dr. Dakin in his presidential address at the Obstetrical Society of London last year. Dr. Dakin compared the careful instruction in medicine and surgery which the student is compelled to undergo, by the examining boards, at the hands of members of the hospital staffs, with the casual way in which he is allowed to get his practical knowledge of midwifery; all that is wanted from him in this respect being a certificate "of attendance on twenty labours," and this may be signed by "one or more legally qualified practitioners." No rules are laid down as to what should constitute "attendance."

The teaching of midwifery will never be placed upon a satisfactory basis until each medical school has its own lying-in hospital or lying-in wards attached to its general hospital, attendance in which, under the recognized teachers of the subject, must be compulsory; and the certificates of those teachers alone should be accepted by the examining Boards; in this connexion I welcome the proposed re-establishment of a lying-in hospital in this city, and trust that it may be made available for the instruction of medical students.

THE MANAGEMENT OF A CASE OF LABOUR.

Early Management of the Mother.

The anxieties and responsibilities of the medical attendant begin as soon as the patient engages him to attend her in her expected confinement; and the first question which arises is, Should he insist on making an abdominal and vaginal examination of every patient?

A few obstetricians refuse to attend cases in which they are not allowed to make such an examination. My own view is that, though such an examination may be theoretically advisable, it is by no means always practically expedient, and it should only be insisted on when in a primipara there is a history of rickets in childhood, or the presence of an actual deformity, as distorted spine, or bent legs, or dwarfed stature, suggesting rickety pelvis, or kyphosis suggesting kyphotic pelvis, or disease of the hip-joint, loss of a leg or lateral curvature suggesting some form of oblique pelvis.

In a multipara the history of previous labours may always be taken as a safe guide, and examination only insisted on when the occurrence of previous difficulties in delivery suggests a contracted pelvis. The patient should be kept under careful observation during her pregnancy; the diet should be regulated, and the urine systematically and carefully examined, particular attention should be paid to the presence of albumen in the urine, and, if this is found in a catheterized specimen, the patient should be