revived operation of dividing the shaft of the femur for genu valgum was also done many years ago by Langenbeck, Meyer, and Bauer, and then dropped. I mentioned this to my class, and gave the reasons which led to the operation being abandoned; but in my published lecture, to avoid being prolix, I did not allude to it, because, in these busy days, one must be charitable enough to credit even the surgeon who would be deemed the most practical with a moderately competent knowledge of surgical history and literature, English and foreign.

I gladly now fill up one or two gaps in my lecture. Mr. Annandale's operation of opening the joint and sawing off the internal condyle on a level with the outer was mentioned to the class; but I did not state that Mr. Chiene of Edinburgh had preceded Dr. Macewen in removing a wedge-shaped piece from the inner condyle. If the reports of the meetings of German surgeons during the last two or three years be looked up, I think it will be found that these operations, or some very like them, have been previously done abroad.

With reference to osteotomy of the femoral shaft, I would just say that Mr. Bradley of Manchester, in a paper read at the recent meeting of the Association, condemns it, and recommends the method of Dr. Ogston, which, to my mind, is a much more severe, though certainly, in bad cases, a more radical method.

On another occasion, I hope to discuss the pathology of knock- and bow-knees, and the reasons *pro* and *con.* the various operations; but now I will merely say that my objections to osteotomy of the femoral shaft are based on the following facts. 1. In severe cases, it is not enough. One must do as Mr. Barwell did—*i.e.*, divide the tibia and fibula six or seven weeks afterwards. 2. It takes (in severe cases) very much longer than loosening of the inner or outer condyle, as the case may be, before the patient is cured. About four months would be a rapid convalescence, whereas the patients may be safely discharged in from four to five weeks in most cases operated on by my method. 3. There is the risk of non-union and necrosis. 4. The suprapatellar pouch of the synovial membrane may be torn, or inflammation may extend to it. 5. To divide three bones when you can remedy the deformity by simply *loosening part of one* is not surgical justice to the patient. 6. Another strong objection to division of the femoral shaft is the fact, that passive motion cannot be safely commenced under six weeks. I now discharge patients in that time. Perhaps No. 4 may be left out of consideration, as extended experience has shown that the proximity of my chisel-cut to the joint-surface is not, as some anticipated, almost certain to lead to synovitis. I have now done fourteen condyles, and never have I had synovitis. In two of my early cases, in which the rickety condyles were much softer than I anticipated, the chisel entered the joint, and there was slight temporary effusion, but nothing more. In another case, in which the joint was entered through the chisel not being sufficiently withdrawn by the dresser while I was straightening the limb, there was not the slightest effusion or pain in the knee, or rise of pulse or temperature after the operation.

I commence passive motion much earlier than I did four months ago. Three weeks since, I operated simultaneously on both knees of two cases of severe double genu extrorsum and one of severe left valgum, and fourteen days afterwards we found that the patients could, voluntarily and without using their hands to the limbs, bend the joints to semiflexion. Passive motion was then resorted to, and is being done more and more daily; and, on my visit to the hospital to-day, just three weeks and two days after the operations, the patients could walk with the slight support of my hand. I allowed this simply to test what they were capable of, and shall continue gentle walking exercise for them every day. I am sure they would have been able to walk much better had I allowed them to get about sooner, and that the weakness of the limbs was not due so much to the result of the operation as to the enforced confinement of the limbs. We all know that even a healthy joint, immovably fixed for a fortnight or three weeks, will become stiff and weak.

I have not in my last three or four cases used the splint of which I spoke in my lecture, but have put up the limbs in plaster of Paris. The small wound will take care of itself. I have always found it healed on removing the bandage. As a precautionary measure, I apply an ice-bag over the knee; but this is not essential. In future, I shall let my patients get about on crutches after the first week.

I believe I was the first to point out that in most cases of genu varum or extrorsum, and certainly in all the rickety ones which I have seen, the external condyle is much overgrown, and the joint-surface is oblique from within down and out; in fact, just the opposite condition obtains to that which is present in genu valgum. In the two cases of extreme genu extrorsum of which I have just spoken, I completely remedied the deformity, as far as the knee is concerned, by loosening the outer condyle and forcibly straightening. I say *straightening*, but in

practice I always over-correct the deformity and produce a slight valgum in extrorsum cases, and *vice versa*, and then put them up straight. If the femur be much curved—a common condition in rickety cases—the knees will be straightened and an inch or two added to the patient's height; but of course the femur will remain curved. The test of the efficacy of the operation is the measurement between the knees in extrorsum cases before and after the operation, and between the feet in valgum cases. In both these cases, the lower two-thirds of the femur were curved, and division of the lower end would have been not simply useless, but really mischievous.

To return to Mr. Jackson: he has long been known to me by repute (through a pupil of mine who was formerly a pupil at the Wolverhampton Hospital) as an active-minded surgeon, always anxious to adopt, without prejudice, anything new or old which promised well for his patients. I had personal proof of this when he wrote me, asking where he could procure my *urethro-cystoscope*. Although I have never heard so from him, I am quite certain that he, in common with all those who have tried that simple instrument, must speak in its favour; and I am just as sure that, if he will try my method of osteotomy in knock- or bow-knees, he will be as satisfied with it as I am and those who have seen the operation and its results. I may, perhaps, be allowed to add that Professor Annandale of Edinburgh practised my operation about a fortnight after an account of it first appeared in the JOURNAL, and that he wrote me on two occasions expressing his entire satisfaction with it. A surgeon now in London saw him operate, and told me of the excellent position in which he got the limb. Professor Annandale operated with the limb extended; I always bend the limb to render the condyles prominent, draw down the suprapatellar pouch of the synovial membrane, and have the leg and thigh well steadied by assistants.

I take this opportunity of thanking several London and provincial surgeons for having sent me some very interesting cases, and to assure them that my complete results shall be made known in due course.

Mr. Jackson agrees with the remarks in my lecture as to the impropriety of claiming successes before they are obtained. I said in my paper, and now I would emphasise my observation, as it does not seem to have been grasped in some quarters, simple enough though the remark be: "The immediate results are very good, and I have no doubt the later ones will be equally satisfactory."

REMARKS ON THE USE AND VALUE OF THE LONG FORCEPS.

By THOMAS RADFORD, M.D., Manchester.

ACCORDING to the opinion of Dr. Swayne (JOURNAL, page 459), the obstetric forceps are more frequently used in cases of difficult labours, at the present time, than they were in times gone by; and there is no doubt that a judicious management of this process, and a timely and appropriate application of the forceps, contributes very greatly to a propitious termination of the labour. He, however, takes a very unfavourable view as to the saving of infantile life. He states that he agrees with the opinion of Dr. Galabin, who says: "It has not been shown that the majority, or any considerable proportion, of the stillbirths which now occur in Britain would be preventable by a more timely resort to forceps." (See *Obstetrical Journal*, vol. v, page 586.) To what practical purpose will such a conclusion lead? Is it meant that, so far as infantile life is concerned, it would be the most safe to trust the issue of the labour to the natural efforts? Can statistics, which embrace such various and different particulars, lead to a true deduction? For my part, I do not fear to declare that I think it is quite impossible to come, from them, to a right conclusion as to infantile mortality.

If the practice of the Rotunda Lying-in Hospital, Dublin, during the mastership of the late Dr. Collins, be compared with that which has since been adopted, it will be found that there has been an immense saving of infantile life by the early and more frequent use of the forceps—thereby superseding the prevailing practice of the destructive operation of craniotomy.

From 1842, Dr. Swayne used the forceps in one hundred and sixty-three cases; but he excluded ten cases from his calculation which were complicated with convulsions, hemorrhage, and prolapsus of the funis, and therefore attended with special danger, so that there remained for his computation one hundred and fifty-three cases, in which the forceps were used on account of want of uterine power, or want of room in the pelvis. Of these, ninety-two were consultation cases, and sixty-one were attended by Dr. Swayne himself. The infantile mortality in the one hundred and fifty-three cases was twenty-three stillbirths, of which all

were consultation cases except six, so that, in the sixty-one attended by Dr. Swayne, there was one in ten still-born. Many of the consultation cases were in a condition unfavourable to the chances of saving the infant, several having been exposed too long to the mischievous influence of protraction. In others, several doses of ergot had been administered. In one case, great mischief had been inflicted; the perineum was lacerated by two practitioners who had been using the forceps and vectis. Two infants were putrid. In four cases, the funis was found round the necks of the infants, which had been pressed upon by the extremities of the forceps. The heads of several of the infants still-born had received injury from the pressure of the forceps; and several of those born alive had not escaped from serious injuries from the pressure of the forceps. In order to more justly appreciate the consequences of the forceps-pressure, I must refer the reader to Dr. Swayne's observations.

It is stated that protraction of labour is more dangerous to the infant than it is to the mother. Pressure, either as to intensity or duration, is fraught with the greatest danger to the infant. Dr. Swayne says: "The important question to be considered is, whether the timely use of the forceps saves the child from this dangerous amount of pressure?" His answer is: "I do not think it does; for I believe it diminishes the duration only by increasing the intensity of the pressure." In the twenty-three fatal cases of forceps delivery, seventeen were consultation cases, and, therefore, were peculiarly difficult. In most of them, the head was much elongated and had become so much altered in rotundity that the forceps were liable to slip, and therefore required more force to keep their hold.

We are left in uncertainty whether the long or the short forceps was used; but my remarks are chiefly made in reference to the employment of the long.

The deaths are stated to be clearly due to compression of the head, partly caused by the forceps and partly by the uterine pressure produced during the length of the labour. We are not, however, told what number of the deaths were caused by the forcible compression of the forceps, and what number were caused by protraction. The injuries sustained from the pressure made by the forceps were clearly owing to the construction of the instrument. This I infer from my own personal experience. In my first case, which happened in the year 1817, and for several years afterwards, I used the late Dr. Haughton's long forceps, which have blades of equal length and long handles; the shanks run off in a bow from the shanks. To remedy this last defect, I had an instrument made with parallel shanks, but I omitted making any other alteration. With both these instruments, the infants were sometimes dead, and in most cases there was evidence of different kinds and of different degrees of mischief, which had been inflicted by the injurious compression of badly constructed instruments. Since I altered the construction of my forceps, I have always had great confidence in a judicious use of the instrument; and I have invariably stated that, when it was used in proper cases, the long forceps may be truly considered as compatible with the lives of both mother and her infant. According to the result of my practice, I feel warranted in saying that, if the infant be vigorously alive, the case in every way appropriate, the operator judicious, and if the instrument be well and rightly constructed, the infant ought to be saved.

The head of the infant is, before birth, so wisely formed and adapted as to safely bear a considerable degree of pressure without injury; but, although this is the case, yet it must be understood that there is a limit beyond which it cannot be endured without proving destructive to the life of the infant. I feel convinced that the pressure produced by the labour-pains can be longer and more safely endured than it can under artificial compression by the forceps. If, then, the pressure produced by the forceps be really so destructive to infantile life, it must be proper to adopt effective means to obviate this mischief. The handles of midwifery forceps in general are too long, and thereby afford the operator power to squeeze the head of the infant to such an extent as to be certainly destructive of its life. The handles of the forceps ought to be so short that undue pressure cannot possibly be made. In my opinion, this instrument ought to be chiefly used as a tractor, and only limitedly as a compressing power.

To save the life of the infant by the use of the long forceps is doubtless the object of every obstetrician; for, unless this were his intention, it would be better at once to have recourse to craniotomy.

To insure the successful application of the long forceps in saving infantile life, the practitioner should keep constantly before his mind the dangers of protraction, and recollect that these dangers increase in a ratio proportioned to the length of time the labour is prolonged.

It is, then, the duty of the obstetrician to ascertain the real condition of the labour, and to become aware whether there exists any cause of obstruction in the brim or cavity of the pelvis, which may require arti-

ficial aid to bring the head of the infant forwards. If this condition be known before the membranes are ruptured, so much the better; but, if the practitioner be not aware of the existence of an obstructing cause before the waters are discharged, no time should be lost in thoroughly acquainting himself with it. If the pelvic brim is so diminished in its measurements as to require the use of the long forceps, the sooner they are applied so much the better, before the pelvic structures have been subjected to such a degree of pressure as will assuredly produce a further diminution of space. In such cases, it is unwise to wait for the full dilatation of the os uteri before the forceps are applied after the rupture of the membranes, as it is impossible for the head to be forced upon this aperture so as to dilate it.

I will now make a few observations on the practice of introducing the forceps before the os uteri is fully dilated. It is reported (JOURNAL, page 284): "Dr. Swayne, in reply, said that much was owed to the Dublin School of Midwifery in teaching us to use the forceps before the os uteri is fully dilated."

If the opinions of many of the leading accoucheurs of Dublin were examined, it will be found that this practice is decidedly disapproved of by many. (See discussion at the Obstetrical Society on the Report and Clinical Records of the Rotunda Hospital, *Dublin Journal of Medical Science* for August 1878, page 140.)

This practice, if received as an unconditional rule in forceps operations, would be most dangerous and fraught with the mischief of organic lacerations. It is a practice which should be considered as only conditional. The forceps may be safely introduced by an experienced obstetrician, such as the Master of the Dublin Rotunda Hospital; but it is not a safe procedure to be accepted as an unconditional operation and to be generally adopted.

The proposition to use the forceps before the os uteri is fully dilated, did not originate in the Dublin School, but I had adopted and recommended the practice before I delivered my address at the meeting of the Provincial (now British) Association at Manchester, September 1854. (See my *Observations on the Cesarean Section and other Obstetric Operations*, page 30.)

I say: "To wait for the dilatation of the os uteri after the rupture of the membranes is a great mistake; for, in the great majority of cases which require the aid of the long forceps, this organic change cannot take place. The obstacle being at the brim of the pelvis, the head of the infant cannot be pressed down upon it, so that before this change happens irretrievable mischief may be inflicted by the continued pressure which the pelvic tissues must under such circumstances endure."

For a description of my long forceps, see my *Essays on various subjects connected with midwifery*.

ON OLEATE OF ZINC IN THE TREATMENT OF ECZEMA.

By H. RADCLIFFE CROCKER, M.D.,

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To the several valuable preparations of the oleates for which we are indebted to Mr. Marshall, the oleate of zinc promises to be a most useful addition. I now wish to draw attention to its utility in eczema. Mr. Martindale of New Cavendish Street prepares it by stirring together one part by weight of oxide of zinc with eight fluid-ounces of oleic acid as free from palmitic acid as possible, and, after letting it stand for two hours, heating it until the zinc is completely dissolved. On cooling, it forms a yellowish-white hard mass, which can be made into the consistence of ointment by the addition of one part of vaseline or olive-oil, or two parts of lard or simple ointment. Vaseline is preferable, as it is not liable to change. The other preparations, soon becoming rancid, should be freshly made, and then answer equally well and are much more economical. Mr. Martindale has also spread it on thin paper, which is a convenient way of applying in some cases.

The above preparations I have found very effectual in acute and chronic eczema in the discharging stage. In the dry stage, it is also useful; but in many cases more stimulant remedies cure more speedily. The two following will show its mode of application and its merits, and are chosen as being the first two in-patients on whom it was tried, while the extent and duration of the disease were sufficient tests of its value.

CASE I.—O. N., a boy aged 7, was admitted into University College Hospital on May 7th, under Dr. Tilbury Fox, with a history of having been treated in a provincial hospital for twelve months for general eczema with only slight benefit. How long he had been suffering before this was not ascertained. On admission, the face, neck, and scalp were covered with pustular eczema. Thick yellowish crusts, with copious