retain the head of the bone in situ. Cut away the whole of the muscles and tendons surrounding this joint, and you will find that the capsular ligament has no power to retain the head of the humerus in the glenoid cavity, but that, on the contrary, it is so long and loose as to allow the bone to drop, and thus to become dislocated. The same thing is observed in paralysis, where, from wasting of the muscles, the humerus drops away from the scapula, and becomes subluxated. In the ginglymoid joints, the muscles and tendons, passing in front and behind, confer great strength on the part, whilst the knee joint is entirely dependent for its anterior capsule on the expansion of the quadriceps extensor femoris muscles. We also observe a very wise provision in some of the joints, especially in the elbow and shoulder, where the muscles adhering to the capsular and posterior ligaments of the joints, at the time of this contraction, draw out the ligament, and thus prevent its being bruised or crushed between the moving bones.

I shall have to direct your attention to some of the phenomena of muscular contraction, when we come to the causes and treatment of dislocations.

CASE OF DEFORMED PELVIS—CÆSARIAN OPERATION—DEATH.

By FREDERICK COX, Esq., Welford.

Rebecca Brooks, aged 27, the subject of this paper, was a single woman, residing at Welford, pregnant for the first time. She was a very diminutive person, with large head, short neck, short crooked legs, very hollow back, and weak intellect. I was called to attend her on Thursday, the 8th instant, by an order from the relieving officer. I saw her at five o'clock, p.m. I found her in labour; she had been so throughout the day, and had experienced strong pains since twelve o'clock. The pains were now strong and regular, and occurring about every five minutes; the membranes were ruptured by a pain, and much liquor amnii had escaped. On examination I found the vagina well lubricated, soft, and easily distensible. Upon passing my fingers into the pelvis, I met with a large round substance, which I at first took for the child's head; but soon discovered to be the promontory of the sacrum, occupying the greater part of the pelvis. With a great deal of difficulty I succeeded in getting the fore-finger of my left hand over the pubes, and ascertained the child's head to be presenting. I was alarmed at finding I could but just pass two fingers between the sacrum and pubes, or, in other words, to find the antero-posterior diameter of the pelvis to be about an inch and a half. After waiting an hour, I sent for my friend Mr. Colston, of Bosworth, and we had a consultation, the result of which was, a determination to obtain a third opinion, as we coincided that craniotomy would be of little or no avail, there being insufficient space for the base of the skull, &c., to pass. After considerable delay we were so fortunate as to obtain the aid of Mr. Francis, of Harborough. The poor woman had continued to have pains regularly throughout the night, and at eleven o'clock on Friday morning we met in consultation, and, having well weighed the matter, we agreed that we would attempt craniotomy; in fact,

although it held out but small hope of success, we considered we were bound to try it patiently and perseveringly. The child's head remained exactly as it had been at five o'clock on the previous night; it could be readily felt on the outside of the abdomen resting on the upper edge of the pubes. The os uteri had been fairly dilated many hours. The operation was performed in the usual way, and after between two or three hours almost incessant labour, we painfully felt that our efforts had been useless, as, after crushing the head, we could not cause the advance of the rest in the smallest degree, and we discontinued longer employment of these means. The patient's pulse was now fluttering and feeble; she evinced symptoms of temporary exhaustion, and the labour pains were almost suspended.

We again consulted, and were unanimous that the Cæsar operation could alone deliver her, and having explained to the poor creature and her friends her exact situation, and the nature of her case, and proposed the only remaining remedy, we withdrew for half an hour. The patient and her mother were both willing that the operation should be performed, especially the former, who said that she would rather suffer any operation, than allow us to renew our attempts to extract the child.

At half-past two we proceeded to perform the Cæsar operation, having previously ascertained that the bladder was empty. The patient having been placed upon a board, with the head and shoulders a little elevated, an incision was made through the skin and cellular membrane, about seven inches in length, a little to the left of the linea alba, and commencing about two inches above the umbilicus; having carefully dissected through the parietes at the upper end of the incision, so as to admit two fingers, I used these as a director, and completed the external incision. The peritoneum was simultaneously divided; no hæmorrhage attended this step of the operation. The protruding intestines were carefully held aside by my friends, and an incision of four inches and a half in length was made into the uterus, commencing a little below the fundus; the walls of this organ were about three quarters of an inch in thickness. Considerable hæmorrhage now took place, the more so, as the placenta was placed rather anteriorly, and about a third of it was cut through. The child was easily and quickly removed, and the placenta with the same facility, the uterus contracting forcibly and well. The child was large and well made, and of more than average dimensions. The blood lost did not amount to more than fourteen or sixteen ounces. The edges of the abdominal wound were brought together, and five sutures employed, placed about an inch apart. Adhesive straps round the abdomen, and a bandage, completed the operation.

I ought to have stated that a quantity of serum was seen in the abdomen when the parietes were cut through.

Scarcely was the operation finished before symptoms of syncope were manifested, and the woman vomited a considerable quantity of a greenish coloured fluid—an early intimation of the sympathy existing between the stomach and the injured uterus. The patient was placed in bed, and thirty drops of laudanum administered. She soon recovered from the more alarming symptoms, and expressed herself easy and comfortable,

and said, "this operation was a flea-bite to the other," alluding to our attempts to extract the child.

6 p.m. Pulse 100, soft; has had slight vomiting, but has partially recovered her calm appearance, and is easy. Has occasionally had a few teaspoonfuls of brandy and water. An effervescent draught, with five drops of tincture of opium, every three hours.

10 p.m. The vomiting has continued at intervals; has had no hæmorrhage; the pulse and general symptoms the same as at the last visit. Ordered one grain of opium with five grains of calomel immediately.

Saturday, 10th, 7 a.m. Has had no sleep; complains of slight tenderness in the abdomen; has vomited occasionally throughout the night; pulse 130, soft and compressible; tongue clean and moist; has passed urine several times; lochia inconsiderable, but there has been a large discharge of sero-sanguineous fluid from the wound in the abdomen; does not appear weak or exhausted, and is very cheerful; has had water gruel and arrowroot with wine.

2 p.m. Met Mr. Colston in consultation; the patient much the same as at last visit, but the vomiting is more distressing. An effervescent draught, with two drops of hydrocyanic acid, every three hours.

8 p.m. Vomiting not relieved; pulse 140, soft. The bowels not having been moved, ordered an enema, which brought away but a small quantity of feculent matter. The hydrocyanic acid having had no effect in abating the sickness, I gave two grains of opium, with five grains of calomel, in the form of pill.

10½ p.m. The sickness has not returned since the pills were taken; is very easy, and inclined to sleep.

Sunday, 11th, 6½ a.m. The vomiting returned about eleven o'clock, and has continued at intervals throughout the night; the matter ejected is of a coffee-ground appearance, and from two to three pints in quantity; the tongue is still moist, but discoloured by the matter vomited; pulse 150, soft and compressible; does not complain of pain, excepting that the bandages, &c., are tight; the belly is tympanitic; some tenderness on pressure. A sero-sanguineous fluid, of an offensive character, has issued from the wound in the abdomen, and some from the vagina; has had nothing pass the bowels; the urine passes involuntarily every time she vomits; administered an enema, which brought away much feculent matter, and gave great ease. Arrow-root and gruel, and a little brandy, have been given occasionally.

11, a.m. Met Mr. Colston in consultation; has had no sickness since the last visit; pulse is more feeble, 160; tongue still moist; we partly removed the bandages, and divided some of the adhesive straps; does not complain of pain, nor of much tenderness on pressure. Continued to take the effervescent salines, with 15 minims of aromatic spirit of ammonia. In the afternoon she slept for two hours and awakened cheerful, but soon after experienced dyspnoea; slight delirium came on and the pulse gradually sank; but the sickness did not return until about eight o'clock in the evening, when she vomited a little grumous matter, and soon after expired, having survived the operation fifty-four hours.

Sectio cadaveris, fourteen hours after death. No attempt at reparation was visible in the external wound this being enlarged and continued transversely on each side, the uterus was seen, well contracted and sinking

into the pelvis; the edges of the incision were in close apposition, but everted, I mean that the edges were together at the decidual surface but apart at the peritoneal, the walls being an inch and a half in thickness. It contained about two or three ounces of coagula. The peritoneal coat shewed patches of inflammation, but only to a trifling extent, and no traces of lymph could be detected; the lining membrane was here and there marked with a patch of redness, and was much congested. On the peritoneal coat of the bladder and intestines a blush of inflammation was here and there seen; but all the viscera were free from adhesions or deposits of lymph. The greatest appearances of disease were apparent on the peritoneum lining the anterior part of the abdomen, and closely in connexion with the cut edges of that membrane, and hereabout a few pieces of lymph were discovered. The stomach appeared healthy; both this organ and the intestines were much distended with flatus. The liver was of its normal size, but of a pale colour; the kidneys were in a similar condition; the lining membrane of the vagina was highly congested; the cavity of the abdomen contained a few small coagula, and about twelve or fourteen ounces of bloody serum.

The uterus, vagina, bladder, and rectum, being removed, the pelvis could be well examined. The promontory of the sacrum with the lower lumbar vertebrae arched forward, so as to overhang the pelvis and fill the greater portion of its space. The space between the sacrum and symphysis pubis was from one inch and three eighths to one inch and a half.

REMARKS.

From the ascertained admeasurement of the pelvis after death, it is very apparent that the child could not have been extracted by embryotomy, and some of my professional brethren may censure its adoption, but I think that those who have had to do with so unusual a case as mine, and others who have witnessed the success that has attended its employment, when adopted perseveringly and patiently, in cases at first holding out small hope of delivery, will readily excuse the practice. English practitioners feel, and justly feel, the great importance of the mother's life, compared with that of the child, and when one or other must be sacrificed, would immolate the latter. Dr. Thynne said "it was better to open six heads unnecessarily, than lose one woman." I do not think many will agree with him in saying so much, but I believe the majority of practitioners would resort to craniotomy first, in a doubtful case, giving the woman all the benefit that may accrue from it, before proceeding to delivery by the only remaining means—the dreadful operation of the Cæsarian section—an operation that has been so singularly fatal in this country, that nothing can justify its use, whilst any possible mode of delivery remains untried.

I cannot imagine a medical man placed in a more delicate and responsible situation than the one in which he has to determine upon the destruction of a child in utero, in a case where there is great doubt of its ultimate advantage to the mother. Yet I think, considering the statistics of the Cæsarian operation, it ought not to be neglected if it held out but a faint hope of a successful termination of the case.

If I might venture to advise those who may unfor-

unately have to deliver by the Cæsarian section, I would say, "Make your incision into the uterus as small as possible, compatible with the extraction of the child." The prostration of the nervous system from an extensive wound into so important an organ as the uterus is immense, and such as few can recover from; how necessary is it, therefore, to save it as much as possible, and not cut an inch nor half an inch needlessly. Doubtless the majority of deaths, the result of this operation, have arisen from the shock to the system, and not from the extensive wounds being beyond reparation.

I think, from the *post-mortem* appearances in the case here reported, it is fair to infer that recovery would have taken place, could the system have withstood the shock consequent upon the operation.

The only difficulty I experienced was from the presence of the bladder, which was not entirely emptied,* and great care and caution were required in order to prevent its being injured; a fact that may be worthy the notice of those who may perform the operation hereafter.

The grateful task alone remains, for me to thank my colleagues for their prompt attendance. I feel great pleasure in thus publicly thanking them for their valuable counsel, and for their patient and judicious assistance, in a case of no ordinary difficulty.

Welford, Northamptonshire, Aug. 21, 1844.

MORBID CONDITION OF THE CEREBRAL FUNCTIONS SUCCESSFULLY TREATED BY DR. WALLIS'S SCALP ISSUE.

By W. S. OKE, M.D., Southampton, Physician to the Royal South Hants Infirmary.

When a severe remedy comes recommended by *respectable* authority for a cure of a dangerous and threatening disease, it surely is the duty of every medical man, when a similar disease falls under his care, and all ordinary efforts have failed, to give the means recommended a fair trial, in order that its efficacy or failure may be determined by the test of general experience.

In the eleventh volume of the transactions of the Provincial Medical and Surgical Association, Dr. Wallis, one of the physicians of that excellent institution, the Bristol Infirmary, has recommended a remedy of this kind for the cure of several grave diseases of the brain.

It consists of a long issue in the scalp, commencing from the centre of the forehead, where the hair begins to grow, and extending (in the adult) seven or eight inches backwards, in the direction of the sagittal suture. It is made thus. The integuments are *completely* divided by a scalpel, and the lips of the wound, from beginning to end, are to be kept apart, first by a thick dossil of lint soaked in turpentine, and afterwards by a double row of peas.

This remedy, it must be confessed, wears a very formidable appearance, especially in *private practice*, and where the patient is of a *tender age*, and was quite enough *prima facie* to make one of our most talented

reviewers to cry out for mercy, and to be delivered "from Dr. Wallis and his issue." But we ought not to allow this remedy to be prejudged, either by such an ejaculation or by its own seeming severity. We must bear in mind that it does not partake of the character of the "*anceps remedium melius quam nullum*;" and as to any pain being occasioned by it, the majority of patients on whom the operation might be performed, will be generally in a state scarcely sensible of it. The principal risk incurred will be hæmorrhage from the ultimate branch of the temporal and occipital artery. In the generality of cases, a moderate hæmorrhage will be of no small advantage; and if the bleeding should be so profuse as to give cause for alarm, there is no part of the body where hæmorrhage can be more readily controlled either by pressure, ligature, or the actual cautery.

As I am not aware that any reports have hitherto been published either in commendation or condemnation of Dr. Wallis' remedy, I feel it my duty to ask you to make known the following case, which was attended by Dr. William Bullar and myself. I trust the result will lead others fearlessly to adopt the remedy in *suitable cases*, where milder means have failed, and where the extreme peril of the patient emphatically calls for decisive practice.

Thomas Thompson, seven years and a half old, was attacked on the 30th of May last, with the febrile symptoms of scarlatina. On the following day the exanthem appeared. It was not accompanied with the ordinary symptom of inflamed throat, and it remained out the usual time. The next three days were marked with great febrile excitement, and the brain became involved. On the 5th of June he was delirious.

Up to this date he was attended by Dr. William Bullar, who had employed such remedies as were most suitable to the case—the mercurial treatment, leeches, blisters, &c. We now attended the child together. We agreed to blister the scalp again, to apply a bladder of ice to the forehead, and to persist in the mercurial treatment.

6th. The symptoms are in nowise improved. He is delirious, almost unconscious, frequently catching at imaginary objects. There is some degree of sensibility of the irides; but the corneæ are drawn upwards and backwards under the superior palpebræ. The pulse is intermittent and faltering.

As all ordinary remedies used under such circumstances were of no avail, as the child was fast sinking under the disease of the brain, and as the case was considered to be hopeless, Dr. William Bullar proposed the scalp issue, recommended by Dr. Wallis, as the only means left that might possibly relieve the morbid condition of the cerebral function. After a little hesitation I assented to the proposal, and communicated it to the parents, taking care to use the term "issue," lest that of "operation," might stand in our way. They put confidence in our proceedings, and gave their consent. In the evening the issue was made in the following manner:—

The hair being shaved off, and the vertex of the child's head brought to the edge of the bed, Dr. W. Bullar began his incision where the hair of the forehead commences, and carried it backwards five inches over the track of the sagittal suture. The scalp was

* The fundus of the bladder containing some urine, being jammed between the head of the child and the pubes, rendered the escape of the urine impracticable.