my opinion, represent its frequency in general practice.

A careful analysis of these cases shows: that inversion of the uterus happens about equally to those who have, and to those who have not borne children before; that the strong are victims to it, as well as the anæmic and weak; that it complicates rapid deliveries, and comes in as an addendum to long, tedious, and instrumental labors; that it appears, at one time, in a uterus that has been greatly distended with amniotic fluid, at another time, in a uterus only two to four months pregnant; that it occurs alike in the hands of careful, experienced physicians, and the ignorant midwife; that traction of the funis and compression of abdomen in the deliveries of the placenta, figure but lightly as determining causes (they were employed in only ten of these twenty-five cases, and but lightly in one-half of the ten); that it matters not whether the placenta be adherent or non-adherent, for of these cases, eleven were adherent, and nine non-adherent.

We find that of these twenty-five cases, seventeen occurred immediately after, or within one hour, after the birth of the child; but in only nine of these seventeen cases was the inversion discovered at once. The intervals during which it remained unrecognized varied from two hours to three days. Of the nine cases that were diagnosticated at once, only five were reduced immediately. One each remained four, ten, eleven, twelve, and fifteen days, unreduced, the others, a time ranging from one to seven hours.

The conditions of the uterus that favor inversion are shown correctly only in those cases where it was handled in the act, the five cases that were successfully reduced at once, and one case in which reduction was unsuccessfully attempted. We find that in these six cases, the os was dilated in every instance, and that the fundus was firm in four cases, flabby in one, and its condition not noted in the sixth, showing that inversion is the result of irregular and independent uterine contractions, or, to use the language of Sir J. Y. Simpson, "the fundus and os are in opposite conditions, the former is in a state of contraction, and the latter in a state of atonic relaxation." And this is further corroborated by the four miscarriages, in which the inversion could have been dependent on no other cause than uterine contraction.

The mortality is great. The death-rate of these cases amounts to twenty-eight per cent. of the whole number. The greater portion die of shock, few of hæmorrhage, and very few of subsequent inflammation.

Treatment. When we recall the fact that by far the greater portion of these cases occurred in the hands of physicians practically unacquainted with the accident, and that nearly all assert that they acted from first impulse, it is interesting to note the uniformity of treatment. In all the cases, save two in which the placenta remained attached to the extruding fundus, the placenta was first removed, and afterward, reduction effected. It appears that the danger from hæmorrhage occasioned by the forcible separation of the placenta from the inverted fundus is not great; in fact, if the placenta be not ruptured, the hæmorrhage is but trifling. The result of the cases confirms the treatment, for of eight thus treated, only two died; while of two cases in which the placenta and fundus were both returned, one died. These latter two cases, however, are instructive in that they show the possibility of returning the fundus with the placenta, especially if attempted immediately.

But when we consider how difficult the extraction of the placenta may be, and the liability of a re-inversion occasioned, by its delivery, the impropriety of such treatment readily appears.

THE CHACLACAYO TREPHINED SKULL.

BY IRVING C. ROSSE, M.D., OF WASHINGTON, D. C.

SOME time since, while I was visiting the National Museum, Prof. Otis T. Mason was kind enough to call the writer's attention to a skull of the elongated Inca type, which is beyond doubt the most remarkable specimen of *post-mortem* trephining that has yet come to light.

The skull, contributed to the Museum by Dr. W. H. Jones, U. S. N., is from Chaclacayo, near Chosica, a mountain in Peru, near Lima, about 4,000 feet high. From the same place, three other skulls of peculiar shape were found.

The section or button of bone, which writers on prehistoric trephining call a *roundel*, was taken from the middle of this frontal bone, leaving an irregular, polygonal opening about two inches and a half in length by two inches in width. The outline of the cutting shows eight distinct furrows, which indicate that the work must have been done in a bungling manner with some primitive implement.

In addition to the usual deformity from bandaging, the specimen under consideration is bent to the left in the occipital region, and the nasal spine is warped, as shown in the illustration. Owing to this deformity and the large frontal opening, the Professor stated that the specimen admitted of no delicate measurements, neither could the capacity be obtained. He requested that the writer undertake the measurement,

which was accordingly done, after fitting and gluing a piece of pine wood into the opening, so as to take the place of the missing portion of the frontal. Additional security being obtained by strips of adhesive plaster, the skull was ready to have its capacity tested, either by shot — after the precaution of enclosing it in a leather cap — or by water. The details of these operations have been described by the writer in Wood's "Handbook," under the rubrics, "*Cephalometry, Craniometry.*"

MEASUREMENTS OF THE CHACACAYO SKULL.

Weight	gm.	460
Capacity	c.c.	1330
Length	mm.	162
Breadth	inter-parietal	mm. 131
	inter-temporal	mm. 132
Breadth of frontal	mm.	84
Height	mm.	149
Index of breadth	inter-parietal	809
	inter-temporal	815
Index of height		920
Index of foramen magnum		54
Frontal arch	mm.	272
Parietal arch	mm.	327
Occipital arch	mm.	245
Longitudinal arch	mm.	361
Circumference	mm.	467
Length of frontal	mm.	118
Length of parietal	mm.	115
Length of occipital	mm.	165
Zygomatic diameter	mm.	137
Facial angle		77
Orbital index		946
Nasal		315
Alveolar		950

On removing a portion of the mummified integument, in order to make the measurement with greater precision, there was found in the anterior part of the sagittal suture, a small opening, which may be congenital, or it may be the result either of a contusion, or of a former operation with a scraping trephine.

REPORT OF PROGRESS IN ORTHOPEDIC SURGERY.

E. H. BRADFORD, M.D., AND H. L. BURRELL, M.D.

CONGENITAL DISLOCATION OF THE HIP JOINT.

LUCKE¹ summarises the natural history of the deformity as follows: The symptoms usually develop, or are discovered slowly, when the child begins to walk. There is no evidence of pre-existing disease. Adduction with rotation inward, common in hip disease, is seen very rarely, the glutæi are frequently atrophied, an atrophy of the limb only develops as a late symptom, and paralysis is never seen. He was unable to agree with Verneuil and his followers who considered the disease as the result of a localized paresis of muscles.

Krönlein regarded the disease as one *sui generis*, a *vitium primæ formationis*.

Mr. Williams Adams² has collected 60 cases, of which 19 were double. In 45 of these the labor at the birth of the child was known, and in half of these 22 cases the labor was said to be prolonged, in seven there was breech presentation. The malformation is not more common in first children than in later children. In one case the child was the eighth child. Hereditary predisposition existed in only one case, in which the father and father's sister were said to have had the same deformity as the children. Nearly all

the cases are brought to notice when between two and six years of age. At birth no symptoms are to be found to call the accoucheur's attention either in deformity, malposition, or immobility of the limb. In some of the children walking is a little delayed; if one hip alone is affected the case is frequently treated as hip disease; when both hips are affected it is usually supposed that the characteristic waddling gait will disappear on growth of the child, which never is the case. At about six the diagnosis is easy, and at from ten to twenty the diagnostic symptoms become exaggerated. The pathological specimens show, as far as known, either that the acetabulum is absent or only existing in a rudimentary form. Great alterations are seen in the size, shape and attachments of the capsular ligament. The head of the femur is usually flattened, wasted and irregular. Mr. Adams does not believe that the deformity is due to spasm of the muscles in utero, or is identical in any way with club-foot, or that it is traumatic due to any violence occurring at birth. The condition is not a dislocation at all, but a displacement due to a malformation of the acetabulum.

Margary has attempted to cure this distortion by operative means; opened the joint in a patient fifteen years old, chiselled out an acetabulum and made, with the help of a periosteum a new capsule of the joint. The operation was unsuccessful, resulting in a death from pyæmia, due to an accident in antiseptic precautions. In a second case a resection of the head of the femur, with a permanent extension. This he has repeated seven times, three times in single cases, four times in a double case. The deformity of lordosis and the prominence of the head of the femur were of course corrected by the operation and satisfactory results claimed by the reporter; the amount of possible motion is, however, not mentioned.

The patient is to be kept two months in bed, and six months in an appliance and crutches. The operation should not be performed after puberty for fear of the formation of a stiff joint.³

The readers of the JOURNAL will not need to be reminded of the unusually successful case of Dr. Buckminster Brown, reported in the *Boston Medical and Surgical Journal*, June 4, 1885, p. 541, which shows that the conservative treatment promises in children a complete cure, provided treatment is thorough and painstaking.

OPERATIVE INTERFERENCE IN TUBERCULOUS DISEASE OF THE KNEE IN CHILDREN.

Müller⁴ reviews the operation of "Arthrectomie" as a substitute for excision in children. The method has been in vogue at the Göttingen Clinic since 1881. Differing from that described by Volkmann in but a few details. Instead of the cross incision and dividing the patella favored by Volkmann, König at the Göttingen Clinic, prefers either two straight side incisions, or a straight median incision. By either of these methods the synovial cavities and sacs can be opened so as to be everywhere visible to the eye and within the reach of the requisite instruments, namely, the chisel, forceps, and scissors. Although it is not necessary to use the Esmarch band, yet it is a help.

The operation is without especial danger. Out of 22 operations none died directly from the operation; one died from chloroform, one from iodoform, two

¹ Centralblatt f. Chir., No. 48, 1885.² British Medical Journal, November 7, 1885.³ Archiv. di Orthopedia, 1884, No. 5 and 6. Centralblatt f. Chir., No. 42, 1885.⁴ Centralblatt f. Chir., Dec. 12, 1885, No. 50.