

# THE PROVINCIAL MEDICAL JOURNAL.

Vol. I.

HALIFAX, N. S., AUGUST, 1868.

No. 2.

## Original Communications.

### ON FLEXION OF THE HEAD IN LABOUR.

BY A. HATTIE, M. D.,

LECTURER ON OBSTETRICS IN THE DALHOUSIE SCHOOL  
OF MEDICINE.

On May 15th I was called to attend Mrs. — in her third confinement. I ascertained, on my arrival, that she had been in labour about twelve hours, and that the uterus had been acting powerfully, particularly during the latter part of that period.

On examination, per vaginam, I found the head presenting in the third position, but arrested above the pelvic brim. The first movement, namely, that of flexion, had not taken place, in consequence of which the uterine contractions forced the occiput against the side of the brim, where it rested a little anterior to the right sacro-iliac synchondrosis, while the anterior part of the head occupied the superior strait. The liquor amnii had not yet escaped; the os uteri was soft and dilatable; the lower part of the uterus flabby and uncontracted; the pelvis roomy, and the parts in a healthy condition.

As delivery was impossible while the head remained in this situation, I proceeded at once to give the necessary assistance. Placing the patient in the usual obstetric position, I introduced the right hand into the vagina, passed it up between the side of the head and the promontory of the sacrum, till the vertex rested on the palm of the hand, then grasping the head firmly—the fingers passing over the posterior portion of it, raised the anterior part above the brim, and by a slight movement of the hand brought the occiput into the cavity of the pelvis. Still retaining my grasp, I now made a gentle rotary motion of the wrist, which brought the head into the second position. These movements accomplished, the hand was immediately withdrawn, and the uterus acting vigorously, delivery was completed in about twenty minutes. The patient made a good recovery.

In connection with this case there are several points of interest, but as the obstruction offered to the descent of the head is the most important, I propose to inquire briefly into its cause. Before we can understand the reason why flexion sometimes fails to take place, it will be necessary to ascertain the mechanism by which this movement is produced.

At the commencement of labour, when the cephalic extremity presents, the head lies above the brim with the vertex nearly in a line with the plane of the superior strait, but soon after labour sets in a change takes place,—the occiput descends into the pelvis, which brings the vertex nearly parallel to the axis of the brim, and the chin is pressed firmly against the sternum. What, therefore, produces this change? We are told by writers on the subject, that this movement is effected by the uterine contractions forcing the foetal head against the resisting cervix uteri and pelvic brim. It must be admitted that the efforts of this organ play an important part in producing the first movement of the head in the process of parturition, but I cannot conceive how the resistance offered by the cervix to the occiput can possibly facilitate its descent, if we only consider it as a point of opposition to the forcing down action of the uterus.

The resistance of the pelvic brim might aid in accomplishing this change, providing it is offered at a point near the anterior portion of the head, otherwise it must be worse than useless; for if placed near the occiput it must necessarily retard its descent.

But does the head usually enter the pelvis in such a manner as that the anterior portion is the only point in contact with the brim? I think that this is rarely if ever the case, for the occiput being ordinarily the lowest point of the presenting part at the commencement of labour, either descends into the cavity of the pelvis or lodges against the side of the brim before the front part is sufficiently low to meet with any resistance from this bony structure, which renders any aid that might arise from this source either unnecessary or useless.

For the cause of flexion in labour I believe we must look entirely to the uterus, the con-