

Editorials.

WALCHER'S POSTURE.

One of the curious facts in medical life is the readiness with which the leaders accept some propositions, and the great difficulties they oppose to the acceptance of others, regardless of the logic or demonstration advanced. That which is distinctly novel has a much more ready acceptance, for a time at least, than that which is closely interwoven with established views. Novelty has no organized opposition. Modification of other men's claims must not only meet an organized opposition but must over-ride the ante-mortem monuments to fame of watchful egotists. Walcher, in 1889, announced, much to the astonishment of some and the amusement of others, that by placing a parturient woman on her back, with the limbs hanging free over the edge of a table, and with a pillow under her sacrum, the conjugata vera diameter was lengthened. Inasmuch as no one living had any pet hobby that was interfered with by this statement—the last claimant, Mercurio, having been dead 289 years—Walcher did not find an organized opposition to contest his statement, only ordinary doubt and incredible curiosity being aroused. Experiments on cadavers, dumb tools of ardent enthusiasm, seemed to prove his words as true. Clinical experiments on living pregnant served to further strengthen the view. With the finger in the vagina, pressed against the promontory, with the thighs flexed upon the abdomen, the diagonal conjugate was felt to lengthen, that is to say, the promontory receded as the limbs were extended. And if the diagonal conjugate that measured 12 centimeters lengthened to a diameter of 13 centimeters following thigh extension of course the conjugata vera must have lengthened also. Naturally, after such convincing demonstration of a theory, the labor tests that followed gracefully added their scarcely needed but still final proof that Walcher was right.

But as weeds will spring up in the finest of gardens, so when the profession had had sufficient time for mental incubation of this germ of wisdom, a contestant appeared: Varrier, who denied before the Moscow Congress in 1897, that Walcher's posture increased the pelvic diameters. Eight years in possession of a new and 'valuable if true' discovery is very likely to find its originator an advocate as well as an investigator. Walcher's posture was then re-investigated and given the benefit of mathematical precision. It increased the conjugata vera 1 centimeter.

A numeris non disputandum. He who fathers an original idea in medicine must fight three opponents—the one who claims it is of no value; another who will show, if it is of any value, that the claimant did not originate it; and the third who will take it away from him if he can. Walcher has met though not convinced the first, he has fared very well with the second, the third has not yet appeared. Avicenna, Mercurio, and Melli, all dead, found hearty advocates in Klein, La Torre, Küttner, and others. But Walcher seems to have secured his copyright.

We confess to a decided want of faith in the interpretations or the value of Walcher's posture. Walcher claimed a gain in the diameter of the conjugata vera of from 8 to 15 mm.—23 millimeters may be taken as the equivalent of 1 inch—in changing the patient's attitude from extreme flexion of the thighs to extreme extension (Walcher's posture). Klein allowed a gain of from 5 to 6 mm. in the non-gravid. Dürrssen figured the increase at 5 to 12 mm. in pregnant. Jewett found an increase of from 5 to 7 mm. in cases recently confined. On cadavers he found an actual gain, taken by direct measurements, of 4, 5, 6, and 4 mm. respectively in four cases.

Bristow, measuring cadavers with extreme accuracy (Jewett, *Brooklyn Med. Jour.*, Vol. I., 1894), found an increase of $\frac{3}{8}$ inch (about 3 mm.) in the conjugata vera. Fothergill (*Edin. Med. Jr.*, 1895), found an increase in the diagonal con-

jugate respectively of .8 cm., 1.2 cm., 1 cm., 1 cm., .8 cm., and .8 cm., an average increase of .93 cm.

Here, then, we have given by actual measurements on the cadaver, the promontory and symphysis being exposed and measured with an accuracy that cannot be questioned, an increase in the extreme change of position from thigh flexion to extension of $\frac{1}{8}$ inch. We may allow that the cadaver would not give as much elasticity of the pelvic joints as a pregnant woman, though the difference must be very slight. In pregnant women it is, of course, not possible to take a direct measurement of the conjugata vera by pressing in the abdominal wall until the finger or instrument rests upon the promontory. Such measurements as can be made must be by noting the diagonal conjugate and from that estimating the vera. *Because the diagonal conjugate increases in the change of position from thigh flexion to extension, it does not follow that the diameter of the conjugata vera increases in proportion, or at all.* Jewett says (see above): "The innominate bones are capable of rotation on a transverse axis drawn through the sacrum. The sacral promontory lies in a plane above the axis of rotation and in front of it, and thus moves forward and backward, according to the changing position of the body." We are unable to see how it is possible for the innominate bones to rotate on a transverse line drawn through the sacrum to any appreciable extent. There is possibly some slight rotatory movement of the innominate bones at the sacro-iliac joints, these joints having a true synovial lamina in some proportion of cases, not however constant.

There is a general increase in the curvature of the last lumbar vertebra and the sacrum in the change from thigh flexion to extension in Walcher's posture. From a theoretical standpoint, the only way in which the conjugata vera can be lengthened is by having the symphysis' upper border brought opposite the sub-promontory hollow or back curve of the sacrum. This is done to a slight extent in Walcher's posture.

This posture increases Barnes' curve, the fetus' body being pressed more closely against the lumbar vertebræ by the tension in the abdominal wall in Walcher's posture, and the head being more sharply curved around the promontory.

This increased curvature would enable the parietal eminence of the fetal head which lay next the promontory to slide slightly under it before the opposite parietal eminence next the pubes would be compelled to pass below the level anteriorly of the obstetrical conjugate.

In other words, Walcher's posture may in some cases enable the posterior ear to enter the true pelvis before the anterior ear, and as the diameter from the middle sacrum to the symphysis is greater than that of the conjugata vera, thereby obtain a practical increase in the entrance diameter of the pelvis. Walcher's posture tends to make the plane of the inlet run from the upper border of the symphysis to a point about 1 centimeter below the ordinary point on the promontory. This, it seems, gives an entirely distinct explanation of the meaning of Walcher's posture, and, best of all, leads to a more intelligent application of it in labor: i. e., that we should endeavor to cause the anterior parietal eminence to override the symphysis while pressing the posterior parietal eminence into the hollow of the sacrum.

Walcher's posture following thigh flexion causes the symphysis to rotate like a satellite around its planet in the arc of a circle at all points equi-distant from its pivot, and as the anterior curve of this pivot—the promontory—is almost equi-distant from this pivotal point from its upper point until it joins the under arc of the sacrum, we cannot believe there is any appreciable increase in the original conjugata vera by reason of Walcher's posture.