CASE OF LABOR AT FULL TIME WITHOUT ARTIFICIAL AID, IN A CONTRACTED PELVIS.

BY WILLIAM READ, M.D., BOSTON.

[Communicated for the Boston Medical and Surgical Journal.]

MARY McC—, æt. 21, unmarried, entered the Boston Lying-in Hospital Feb. 14th, 1856. Patient is of dwarfish stature, and has double lateral curvature of the spine. Pregnant for the first time. Last catamenial period began June 15th. Quickening first noticed Oct. 30th. (Concerning this fact there seems to be considerable doubt, patient having given two periods to different inquiries.) Supposes herself to have nearly completed her eighth month of pregnancy. Owing to her bodily deformity, it was supposed by the physician to whom she applied, in St. Johns, N. B., her native place, that the Cæsarean section must be resorted to, and with this view she was put under the charge of Dr. Owens, of this city, by whom she was sent to the Hospital. Upon her entrance she was examined by Dr. H. R. Storer, who was then on duty as attending physician. Her general aspect was unfavorable, conveying the impression of great feebleness and want of due power in the nutritive functions. The pelvis was found to have little depth and to be much contracted in size, although free from distortion, presenting in a marked degree the characteristics of the "equably contracted pelvis" of authors. By measurement with Baudelocque's callipers, the external diameters were as follows, viz. :

Antero-posterior, $5\frac{1}{2}$ inches.	Standard (Churchill).
Between ant. sup. spinous processes, $9\frac{1}{2}$ inches.	7 to 8 inches.
	10 to 12 "

Internal Diameters.

From pubis to promontory of sacrum, 3 inches.	4 "
From pubis to coccyx, $2\frac{1}{2}$ inches.	4 to 5 "
Between tuberosities, $2\frac{1}{2}$ inches.	4 "

In view of this great diminution of the pelvic cavity and outlet, Dr. Storer proposed the induction of premature labor as ensuring greater safety to both mother and child. A consultation with his colleagues—Drs. Dupee and Read—was solicited. The measurements of the internal capacity of the pelvis obtained by these gentlemen were somewhat larger, as follows, viz. :

Pubis to promontory of sacrum,	$3\frac{1}{4}$ inches.
Pubis to coccyx (Dr. Read)	3 "
" " (Dr. Dupee)	4 "
Between tuberosities,	$3\frac{1}{2}$ "

In view of this diversity of result, taking into account the fact that the pelvis, although much undersized, was of regular shape and well proportioned, its diameters being relatively good, and the child, as felt through the abdominal walls, small, partaking apparently of the deficient nutrition of the mother, there being also

some doubt as to whether the term of pregnancy was not nearer its close than estimated; and finally, that if the patient was correct in her reckoning, the time of her labor was so near that the increase in size which the foetus would gain could not materially affect the probabilities of her safe delivery, and being unwilling to advise the operation for its own sake, no necessity being proven, it being her first pregnancy, they, after careful consideration, gave an opinion adverse to any interference with the natural progress of the case.

Under these circumstances, it was thought best to bring the case before the board of consulting physicians of the institution. Upon an examination by them, the measurements obtained by Dr. Channing and Dr. Putnam coincided with those before made by Dr. Dupee and Dr. Read. Dr. D. H. Storer, who, being unable to attend at the appointed time, had made a previous investigation, obtained similar results with those of Dr. H. R. Storer, except between the tuberosities of the ischia—internally—which he made one eighth of an inch less, viz., $2\frac{3}{8}$ inches. Dr. Bigelow was not able to attend. Upon mature deliberation, it was decided to allow the case to go on to its natural termination. Dr. Storer's term of attendance having expired on the first of March, the case passed into the care of Dr. Dupee.

April 13th.—Labor commenced at 6, A. M. Child born at 8, P. M. Presentation natural. Male, living. Weight of child, 7 pounds; of placenta, 1 pound. Length of child, 21 inches; to umbilicus, 11 inches; of funis, 26 inches. Antero-posterior diameter of head, $4\frac{1}{2}$ inches; bi-parietal, $3\frac{1}{2}$ inches. Child born by efforts of nature alone. Dr. Dupee in attendance. Duration of pregnancy from last menstruation, 301 days, or 43 weeks.

May 22d.—Mother and child discharged well.

In view of the facts in this case, many interesting and instructive points present themselves.

1st. The patient went nearly a month beyond her reckoned time. This shows that, after all, no implicit reliance can be placed upon dates as to the time of the commencement of labor, and adds another to the many instances already recorded, which go to prove that while nine calendar months, or ten catamenial periods of four weeks each, are by common experience the natural term of pregnancy, it is not an absolute and unvarying rule, and should so be considered in every operation involving the safety of the mother or child.

2d. That while in a case of *deformity* of the pelvis, a small diminution of the internal diameters may operate to diminish in a great degree the probability of a safe result to the labor, unless artificial aid be brought into requisition; in a pelvis "equally contracted," its diameters maintaining their relative proportions to each other, a much greater departure from standard measurements does not necessarily compromise the safety of either mother or child. Here was a child of average weight, and full sized, which, by the force of the uterine

contractions alone, was with the greatest ease delivered through an outlet differing from standard size as follows, viz. :

			Standard.
Pubis to promontory of sacrum.			
Drs. Dupee and Read,	3 $\frac{1}{4}$ inches.	}	4 inches.
Dr. Storer,	3 "		
Average between the two,	3 $\frac{1}{8}$ "		
Pubis to coceyx.			
Drs. Dupee and Read,	3 "	}	4 to 5 inches.
Dr. Storer,	2 $\frac{1}{2}$ "		
Average,	2 $\frac{3}{4}$ "		
Between tuberosities.			
Dr. D. H. Storer,	2 $\frac{3}{8}$ "	}	4 inches.
Dr. Dupee,	4 "		
Dr. Read,	3 "		
Dr. H. R. Storer,	2 $\frac{1}{2}$ "		
Average,	2 $\frac{7}{8}$ "		

The head meanwhile measuring, in its antero-posterior diameter, 4 $\frac{3}{8}$ inches, and in its bi-parietal diameter, 3 $\frac{1}{4}$ inches.

If it is urged that the success of this case is rather an instance of good fortune, than to have been expected, *a priori*, and that it was owing to the perfectly natural manner in which the fœtal head presented itself at the brim of the pelvis, and furthermore that if the presentation had been otherwise, evil results must have followed ; it may be answered that the rule of parturition is, that the head presents itself in the best position for its passage through the generative canal, and universal experience proves that it may be relied on. The amount of compression which the fœtal head is susceptible of, when acted upon in the *right direction*, as is well known, is very great, and therefore where the difference of pressure is rather in degree than in kind, we should expect, within certain limits, to find only greater resistance, requiring stronger efforts to overcome it, but nevertheless finally successful. And in this, we think, lies the difference between the danger to be apprehended from the "equally contracted" pelvis and one which is modified by distortion. In the former, the fœtal head presents itself to the prominences which oppose its delivery, in the same direction and in the same way as in the fully-developed pelvis. The bones of the cranium, by their peculiar structure, allowing a great decrease in the diameter of the head by a corresponding increase in length, in a direction which offers no impediment to the labor, thus reducing it in size at a point where space is needed to add to it when there is room to spare, provided the forces which are producing the compression act in the same direction, which they do in a natural presentation.

In a deformed pelvis, on the other hand, the head, in the first place, does not meet with its resistance in all points at the same time, nor in a way to equalize its effect. In the second place, without this antagonism, the more forcibly the expelling power is

brought to bear, the less result is obtained; for the bones yielding in one direction are thrown as much out of the way in another; compression on one side becomes expansion on another, and instead of gaining, in effect produced, the sum of the forces, we get only the difference. We have, therefore, a right to expect, in a case of "equally contracted" pelvis, a safer issue than where the capacity of the pelvic outlets has been equally diminished by deformity; and while it might be right and proper, in the latter case, to take advantage of as early a period in pregnancy as would admit of the viability of the fœtus, to bring on labor, and in this way get rid of the increase in size which takes place in the last months of pregnancy, in the former it is believed no such imperative reasons present themselves; particularly in a first pregnancy, in which, after all, the uterine contractions may be sufficient of themselves, as in the case here noticed, to bring about delivery.

FATAL CASE OF FLOODING.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—Below will be found the details of a case of fatal flooding. Should you deem it of any worth to the readers of your widely-circulated Journal, please give it an insertion.

Dec. 11th, at 11, A. M., I was summoned to attend Mrs. F——, in her second confinement. I had occasionally seen the patient during the last four months, and observed her to be slender and anæmiated. She was accustomed to active industry, having done much white-washing, and moved her family, just previous to her labor. Upon examination, I found the os uteri dilated to the size of a dollar, with the vertex presenting. The case progressed in the usual manner until 7½, P. M., when the patient was delivered of a fine boy. I administered ether in small quantity. After securing thorough respiratory action, I tied the cord with two ligatures, and divided it. I was careful to place the hand on the region of the uterus, as usual, not resting satisfied until I could feel it as a round hard substance, like grasping the bony knee. In this case, the uterus felt hard, but rather flattened. An attendant was directed to place her hand on the uterine region, while I drew gently upon the cord (not forgetting Dr. Channing's admonition, "gentlemen, I dislike the habit of tugging at the cord"), with my left hand, and passed the forefinger of my right under the pubis and traced the cord until it met the placenta. Twenty or thirty minutes had elapsed, and no uterine pains had occurred. Directing the patient to blow upon the back of her hand, I endeavored to remove the placenta, when suddenly flooding commenced. The application of cold water and ice was immediately made; the patient swooned from loss of blood and terror combined. Perhaps fifteen minutes had elapsed, when the flooding ceased. Now all our exertions were directed to rallying the patient; her breathing became audible, the pulse returned