## SOME ANCIENT METHODS OF DELIVERY.

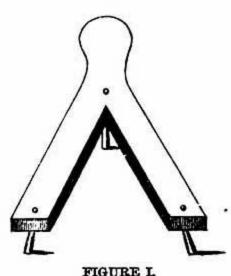
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While pursuing an historical inquiry, through the works of the ancient writers on obstetrics, I was struck with some features of their practice, which are not known to the profession at large. The most striking of these I purpose to lay before you this evening; not, however, on account of their practical value, but in order to bridge over a gap in the history of our art.

From time immemorial, women were usually delivered on a special stool, or on some like make-shift. This position they took at the beginning of the expulsive pains, and kept until the end of the labor. Allusions to this method of delivery are found in records of high antiquity. In Exodus i., 15, 16, we read that "the King of Egypt spake to the Hebrew midwives, of which the name of the one was Shiphrah, and the name of the other Puah; and he said, 'when ye do the office of a midwife to the Hebrew women, and see them upon

the stools; if it be a son, then ye shall kill him: but if it be a daughter, then she shall live." According to this verse, the Hebrew and Egyptian midwives placed their patients in a sitting posture, as early as sixteen hundred years before the christian era. In the Fragments to Calmet (Nos. 312, 313), however, it is contended that the Hebrew word ovnayim, being in the dual evidently means two stones, i. e., a stone trough with its lid; and that therefore, the word rendered "stools" in our authorized version, should be translated the "stone-troughs" in which the newly born infants were washed. With all deference to this opinion of the learned commentator, I would suggest that possibly in that stone age, the women were delivered while sitting, either upon the corner of this trough, or else over the round opening of its stone lid, placed crosswise. Nor will you deem this a mere conceit after examining figure 1, a fac-simile of a wood-cut taken from Joannis Michaelis of Savonarola (Practica Major, Venetiis, 1547, p. 280). In that curious work he highly



lauds this rude stool, and speaks of it as being of great antiquity, and much esteemed by the ancient Greeks. In the original, a companion figure shows it in use, as follows: an assistant sits behind, on the rounded knob, supporting the patient, who is seated in front, upon the forked

portion of the stool. The broad corner of a stone trough would certainly afford quite as good a seat as the forked sides of this obstetric stool.

In natural labors the obstetric stool was recommended by all the Greek writers; such as Aspasia, Cleopatra, Soranus, Aetius, Paulus Ægineta, Oribazius and Rufus Ephesus. It was also advised, in the form of a bench, by the Arabian physicians, Avicenna (Lib. 3; Fen. 21, Tract 2; Cap. 23, 24,) and Albucasis, and also by their immediate disciples. As Hippocrates does not treat of natural labor, he makes no allusion to the use of the stool before the birth of the child; but, in retention of the secundines, he directs the woman to be placed either on a "chamber-pot," Lagaror, or on "a reclining perforated chair," ἐπ' ἀνακλήτου δίφφου τετρυπημενου (De Superfætatione, Ed. Foesii, Francofurti, 1621, p. 261); which shows that he deemed it too familiar an object to need a description. I am bound, however, to add that both Vander Linden and Littre retain simply the "chamber-pot," evidently regarding the "perforated chair" as a gloss of later transcribers. That the Romans adopted the same plan is evident from the works of Galen (De Natural, Facultat., Lib. iii., Cap. 3), and of Celsus (De Re Medica, Lib. vii., Cap. 29), and from the plays of Plautus, 160 B. C. (Truculent., Act ii., Scene 5). There is also a natal coin, struck in commemoration of the birth of the Emperor Antoninus, which represents the Empress Faustina reclining on an obstetric stool, and exultantly holding up her newly born infant, (Schlegel's Sylloge ad Artem Obstet. Lipsia, 1795, vol. i., p. 65).

Moschion, of the second century, the first writer who treats of natural labor, describes the obstetric chair of his day "as in form like a barber's chair, but with a crescent-shaped opening in the seat, through which the child may fall," δπως ἐκεῖσε το ἔμδουον πεσεῖν δηνηθῆ (Περι Γυναικειων Παθων, Κεφ. xlvii). In case this chair could not be had, he recommended the woman to sit upon the knees of an assistant; a practice still in vogue in some parts of Ireland, where the husband usually performs this duty. Moschion was an enlightened and a thoroughly practical obstetrician; he wrote a tract, now lost, on pessaries, and is the first physician who taught that version should be resorted to in many difficult cases of labor. I have examined all the works on antiquities that our public libraries contain, but can find no representation of this "barber's chair." Of much more recent date is Figure 2, but, with the exception of the mortises for two upright handles, it seems very accurately to answer Moschion's description. It is copied



from an unpaged work in black letter of Eucharius Rhodion, (De Partu Hominis, 1544, Cap. 3). A like wood-cut is found in the English translation of this book by Raynalde, (The Birthe of Mankinde, 1598, p. 107), and also, although somewhat embellished, in Fournier's

work, (L'Accoucheur Methodique, Paris, 1677, p. 70).

So highly esteemed was this same form of chair, that the celebrated Jacob Rueff, of Zurich, gives a representation of it, modestly attired, however, in a valance, (De Conceptu et Generatione Hominis, 1554, Lib. iii., Cap. 2). Rueff, by the way, was the author, for whom, as against Harvey, MM. Gavengeot and La Faye, out of hatred to "perfidious Albion," claimed the discovery of the circulation of the blood. Their countryman, Portal, nobly says that "they were actuated more by jealousy and rivalry, than by the love of truth," (Histoire de l'Anatomie, tome i., p. 515).

In 1582, Ambrose Pare (De Hominis Generatione, Cap. 16,) warmly advocated the use of the "sella perforata," on the score that the sacral bones and pelvic ligaments would more readily yield, and the perinæum more easily dilate. The great weight of his authority so influenced the profession that, down to the middle of the last century, the obstetric chair was deemed an indispensable equipment to the midwife and accouch-It is true that, as early as 1668, Mauriceau, with the independence of genius, gave the cold shoulder to the "midwives' stools," as he scornfully called them, and recommended the delivery of the woman on her own bed, (Maladies des femmes Grosses, Lib. ii., Cap. 7). But, a few years later, we find Dionis, then in high repute, roundly chiding him for this innovation, (Traite General des Accouch., 1724, p. 209).

Among the poor the obstetric chair was carried from house to house; every wealthy family owned one as an indispensable article of furniture; whilst, in the palaces of kings, it was kept as a state appendage. Thus, late

in the last century the learned Osiander laid before the obstetrical society of Goettingen the pattern of a portable chair, for the use of country doctors and midwives, so constructed that it could be taken apart, (Essais sur la situation de la femme dans le travail, etc., par A. Filhastre, Montpellier, 1816, p. 31). Louise Bourgeois, midwife in ordinary to the court of Henry IV., of France, naively remarks, in a very curious chapter on the labors of Marie de Medicis that, at the birth of the Dauphin, "la chaise pour accoucher fut aussi apportee, qui estoit converte de velours cramoisy rouge," (Observations Diverses, 1617, p. 153). Again, in 1714, that dilettante, Corneille Le Bryn, states in his entertaining "Voyage au Levant," that he saw in the cabinet of the Grand Duke of Florence the state obstetric chair, which was elegantly carved and studded with jewels.

The use of this chair was probably first suggested by "the resemblance of the expulsive efforts of labor to those made on a close stool to relieve a constipated condition of the bowels," (Baudelocque, l'Art des Accouch., § 600). Thus Ludovicus Bonaciolus puts a woman on the obstetric chair and enjoins her "to strain with those muscles which empty the bowels," (Enneas Muliebris, Cap. 8). Louis de Mercado, court physician to Philip II., of Spain, whom Haller styles a "verbosissimum scriptorem," in that respect quite like his master; enumerates the following advantages arising from the use of the "sella obstetrica": (a) The os uteri is directed towards the outlet. (b) The child's weight aids the expulsive pains. (c) The coccyx is free to move backward, and the perinæum to dilate, (De

Mulier, Affectionibus, Lib. iv., Cap. 3). Of course this position of the woman precluded any support to the perinæum; for, as D. Sennertus teaches, "the midwife's hands must be covered with a cloth into which the child is received," (Practices Medicines, Witteberg, 1632, Lib. iv., p. 412).

As, in our time, eminent physicians are seeking to improve the obstetric forceps, so, in those days, learned men did not disdain to perfect the sella lochica, obstetricia seu obstetrica, as it was indifferently termed. According to Schlegel (Op. cit., p. 67), Welschius, of Leipsic, invented an adjustable back, by which the trunk of the woman's body could be raised or depressed, in order to accommodate the axis of the child's head to that of the curved pelvic canal. Heister, Van Solengen and Van Deventer further improved it by the addition of sides and arms, as in Figure 3, which is reproduced from Deventer's work, (Operat. Chirurg. novum lumen obstetricantibus, Leyden, 1701, chap. xxvi).



FIGURE III.

In 1687, Voelters, of Wirtemberg, gained great credit by devising—what had hitherto been overlooked—a brace for the feet. Justus Godefroy Gunz, physician and counsellor to the King of Poland, made some slight improvement to this chair, and contended that it should be used in every natural labor, (De Commo-

do Parturientium Situ, Lipsiæ, 1741). Daniel Triller also wrote a book on the same subject, (Clino-technia, Francofurti, 1774). Even the great Meckel gave his name to a chair, as well as to a ganglion. Finally in 1772, after seeing "an illustrious lady" fatally injured by falling over backwards from one of the old-fashioned chairs, that excellent accoucheur Stein, professor of obstetrics at Cassel, utilized all these improvements in his celebrated geburtsstuhle, (Geburtshulfe, Marberg, 1805, vol. ii., tabula 9). Numberless pamphlets and references, and several editions and translations of his work bear witness that his contemporaries deemed this the ne plus ultra of obstetric chairs. In fact, the whole continent of Europe hastened to adopt it and to do homage to the genius which conceived it. Who could resist the refinement of its construction; the notches numbered according to the stages of labor; the ingenious foot-brace adjustable, by a nest of clogs, to any length of leg? Briot of Paris, Plenck of Buda and Pitt of Lyons hastened to commend it. Its adoption in France would have been universal, had not Levret and the elder Baudelocque waged a counter crusade. By a reference to Figure 4, the reader will see that the front legs were prolonged into handles for the woman to grasp; and that, by a swinging prop behind, and several notches in front, the back could be raised or depressed to suit the different stages of labor. Thus: at the beginning of active pains the back was made nearly upright; in proportion as the head descended, the angle was increased notch by notch, and then, for further security, the prop was firmly planted into the floor, so that by no possibility could any other "illustrious lady" meet with an untimely end. When the perinæum began to bulge, the ratchets were shifted to the last notch, in order to place the woman in nearly a horizontal position. In addition there was a contrivance, called an "ante-chair," (omitted in the figure) which could be hooked on to the chair proper, converting it into a couch, whenever, through exhaustion or hemorrhage, the woman could not be safely removed to her bed. George Wilhelm Stein was born, bred and buried in Germany; it does not appear that he travelled much further than from Cassel to Marberg, and then probably to correct his proof-sheets; it is even doubtful whether he ever subscribed to the Amerikanischer Demokrat, and yet he constructed a labor-saving machine which would do credit to any of our agricultural fairs.

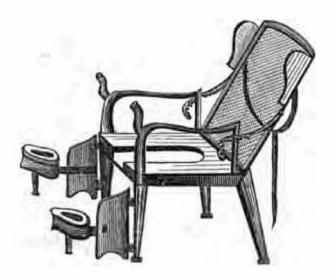


FIGURE IV.

After the use of the forceps became general, and in

proportion as the method of supporting the perinæum grew into fashion, the obstetric chair lost favor in France as elsewhere. When a general favorite falls into disgrace its character is sure to suffer. Early in the last century, John Huwe, of Holland, protested against its use, (Onder Weys der Vrouwen, etc., Haarlem, 1735; from Essais Historiques, etc). Gehler, although its warm advocate, states that "many authors" contend "that the obstetric stool causes prolapse of the womb and ruptures of the perinaum," (De Partus Naturalis Adminiculis, Lipsia, 1772). That "manmidwife," Tolver, asserts, that "at Bruxels, where Deventer's chair is indiscriminately used, lacerations of the fourchette and perinæum are very frequent," (Present State of Midwifery in Paris; London, 1770, p. 9). After the beginning of this century little is heard of it, until 1816, when Filhastre (Op. cit.) vainly strove to introduce the one represented by Figure 5, which was

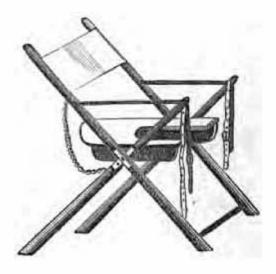


FIGURE V.

devised by Matteo Moro, and highly approved of by

Assalini, Gianni and other eminent Italian obstetricians, (Uso, discrezione, ed utilita di una nuova seggiola obstetricia, Milano, 1812). For the convenience of country practioners it could be taken apart, and carried about on horse-back; it also had two leather straps in front into which the woman's feet were placed. Despite Filhastre's enthusiasm, and the weight of such Italian authorities, the custom had become too obsolete to be revived; and the obstetric chair, coeval with the pyramids of Cheops, passed, after forty centuries of use, from the lying-in chamber to the cabinets of the curious.

Of quite as great antiquity was another method of delivery practiced by the ancients. In lingering labors, and especially in those of fat women, the patient was removed from the stool and instructed to assume the kneeling, or the knee-elbow posture. The reasons assigned are as follows: (a) The perinæum was thus saved from the weight of the child's body. (b) The womb, by inclining forward, would present its mouth directly in the axis of the pelvic canal. (c) This position would cause the abdominal walls and omentum to fall away from the child, and thus relieve it from the super-incumbent weight of fat. It must be remembered that the ancients, arguing from the tedious birth of dead children, entertained the idea, that labor was caused mainly by the struggles of the fœtus to gain its liberty. Hence the expression "still-born" in the folklore of our ancestors, who thought that a "lively child" promised an easy labor, and a "still child" the reverse.

The earliest reference to this posture that I can find, is in Homer's "Hymn to Apollo." After bewailing

Latona's tedious labor of "nine days and nine nights," the bard represents her, in her last throes, as "clasping a palm tree and kneeling upon the soft meadow,"—
'Αμφὶ δὲ φοίνικι βὰλε πήχεε, γοῦνα δ'ἔρεισεν Λειμῶνι μαλακῶ.

It is possible that Homer, regarding more the flow of his metre than the facts of the case, invented the "palm tree;" for, according to Lempriere, other classic writers describe it as an "olive tree." We will not however dispute about the tree, but give Chapman's quaint rendering of the passage:

"When ent'ring Delos, she, that is so dear
To dames in labor, made Latona straight
Prone to delivery, and to wield the weight
Of her dear burden with a world of ease.
When, with her fair hand, she a palm did seize,
And, staying her by it, stuck her tender knees
Amidst the soft mead, that did smile beneath
Her sacred labor; and the child did breathe
The air in th' instant. All the Goddesses
Brake in kind tears and shrieks for her quick ease."

At the risk of dispersing the halo of sentiment which the versification of both Chapman and Coleridge\* has cast around this parturient posture of the Goddess, with regret, I add that, at the present day, the tattooed cannibals of New Zealand, during labor, "kneel down with their thighs apart, and having their hands resting on a tree or stick," (Brit. and For. Medico-Chirurg. Review, vol. 15, 1855, p. 525).

After Homer, this kneeling or knee-elbow posture is alluded to by many writers. Festus Pompeius states that the "Gods of Travail (nixi dii), who presided

<sup>&</sup>quot; "Introduction to the Study of the Greek Classic Poets."

over labor, were three statues in the Capitol, on their knees before the chair of Minerva," (Essais Historiques Sur l'art des Accouch., par Sue, vol. 1, p. 169). "Pinguissimam autem," writes Moschion, "in lecto in genua atque ad dentes collocamus." This same treatment of fat women is found in the works of Hippocrates, Galen, Paul of Ægina, (Op. cit., Lib. iii., Cap. 62, 76), Aetius, (De conceptus et partus ratione, Cap. 22), and of most of the "modern ancients." Nor was it confined to remote times; for in some portions of Russia, Greece and Turkey the women are yet delivered on their knees. In 1779, Hopkins objected to the lateral position, and recommended that on the hands and knees as the best, (The Accoucheur's Vade Mecum). Denman was of opinion that this posture is instinctively sought by an unassisted woman, (Prac. Midwif., London, 1972, part i., p. 58). Whilst in 1791, that shrewd observer Charles White, quoted Denman approvingly, and argued that the knee-elbow position prevented, in a natural labor, too great a pressure on the perinæum, (Management of Pregnant and Lying-in Women, London, 1791, p. 104.

Many other features in the obstetric practice of the ancients are tempting to pursue: such as, in difficult labors, the succussion of a woman by four attendants, advised by Hippocrates, (On Excision of the Fatus, sec. iv.); tossing up a woman in a blanket as recommended by Albucasis in malpositions,—a plan which my friend, Dr. Ely McClellan, U. S. A., tells me is still practiced by the Indian tribes in our western territories. Did time permit, I should like also to trace up

to their source among the ancients, as most of them can be, the prevalent superstitions of the lying in chamber, such as the virtues of the caul, and the non-viability of an eight months' child, the latter being due to the belief, that Saturn, who devoured his sons, was the tutelar god of August, the eighth month. In conclusion, let me offer as an excuse for this very unpractical paper, an opinion advanced by Socrates in his discourse against the sophists of his day: "The arts and sciences are adorned not only by discoveries, but also by the collection of whatever concerns them, whether curious, historical or new."