

## A REVIVAL OF THE OBSTETRIC CHAIR.

By JAMES W. MARKOE, M. D.,  
Attending Surgeon.

The father of medicine may be claimed as the first authority to mention the obstetric chair, which in the writings of Hippocrates is recommended to assist the delivery of the placenta. When the after-birth does not come out, it should "be left attached to the child, and the mother should be placed upon a perforated high chair, so that the weight of the child may help the after-birth to escape." He adds that this should be done con-

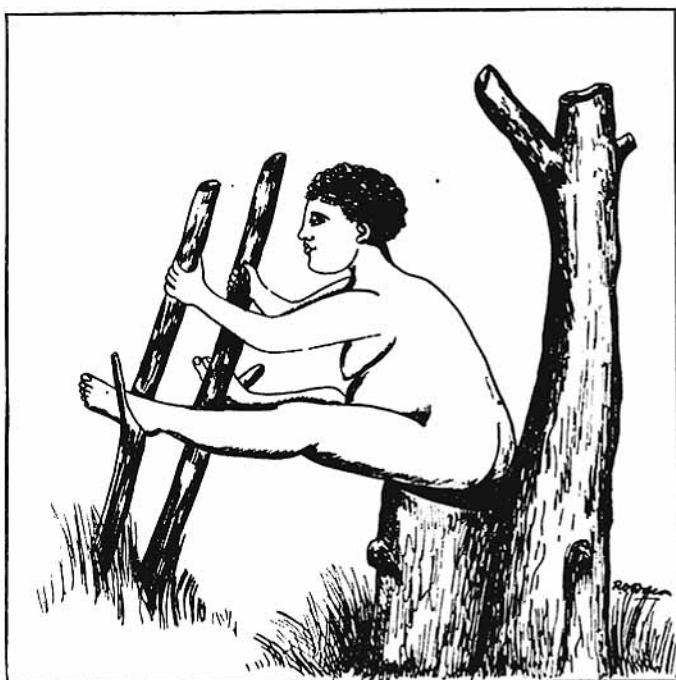


Fig. 1.—Primitive obstetrical chair used by native African women. (This and the following seven figures are taken from a French work,—"*Histoire des Accouchements chez tous les Peuples*," G. T. Witkowsky, 1887.)

tinuously, gently and without traction, so as to guard against inflammation.

The antiquity of the obstetric chair has been much exaggerated in the opinion of Fugelmann, who believes that the earliest possible reference to it in our possession dates back to Moschion, a Greek physician of the second century. Comments upon the use of the obstetric chair are scattered through the writings of several Greek physicians, such as Aetamide, Aetius, Toranus of Ephesus, and Paulus of Egina. The latter

states that the time has come for the mother to be placed upon the chair, when palpation has shown the uterus to be open and when the infant is about to be born.

Until its reappearance in the Middle Ages, there is a gap in the history of the obstetric chair, which is again encountered in the writings of Albertus Magnus, in the thirteenth century.

Eucharius Rhodion (*De Tartu Hominis*, 1532) relates that the midwives of France and Germany had special seats, rather low, with an empty space to allow the child's passage, and a rounded support to receive the back of the extended woman. This chair was packed and stuffed with

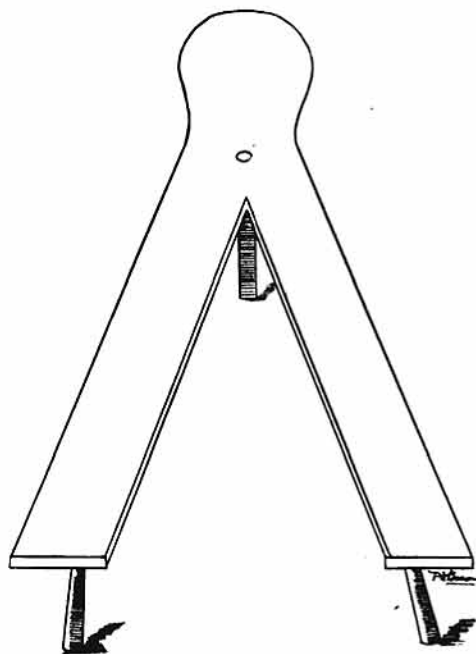


Fig. 2.—Chair after model of Savonarole, 1747.

linen from behind, for after the patient had taken her seat in it, the midwife was to have free space to do her work on either side of the seat. Since the middle of the sixteenth century, this chair was in common use in Germany, but was not recommended for stout women, for whom the kneeling posture was considered more desirable.

An obstetric chair built after the model of Rhodion's chair was recommended by Rueff in Switzerland (*De Conceptu et Generatione Hominis*, 1554). Many years later, this book was translated into English, "For the General Good and Benefit of this Nation," and in it is found the following interesting description of the chair: "Let the stoole be made compassewise, under-propped with four feet, the stay of it behind bending

backward, hollow in the midst, covered with a blacke cloth underneath, hanging down to the ground, by that means that the laboring woman may be covered and other women sometimes apply their hands in any place, if necessity require. Let the stoole be furnished and covered with

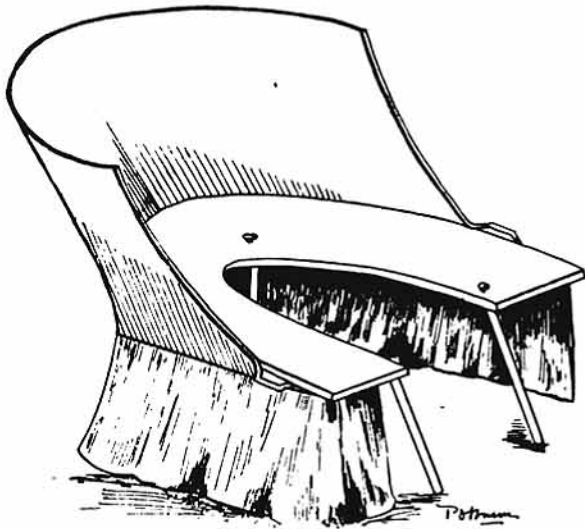


Fig. 3.—Obstetrical chair of Rueff, 1780.

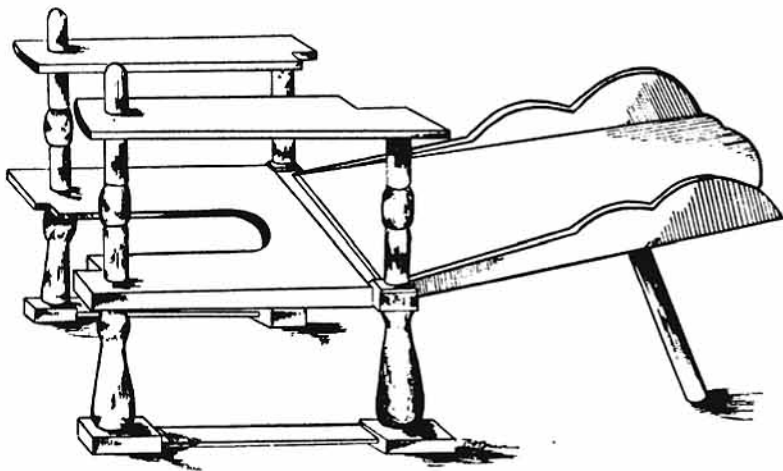


Fig. 4.—Heister's model of an obstetrical chair, 1791.

many cloths and clouts at the back and other parts, that the laboring woman receive not hurt, or the infant any where, strongly kicking and striving because of the pains, stirrings and motions of the mother."

Favorable mention of the obstetric chair is also made by Ambroise Parè, who in his "*Oeuvres*" (1564) points out that its usefulness should not

be underrated: "The chair should not be higher than two feet above the floor. The pregnant woman reclines in it on her back, so that her inspiration and expiration are free; the sacrum and coccyx are exposed and in no way compressed, with the result that these bones are more easily drawn apart and separated. The same is true for the pubes, the thighs being spread apart, which moreover facilitates the manipulations of the mid-



Fig. 5.—Obstetrical Chair of Deventer, 1800.

wife seated in front of the pregnant woman. A cushion should be placed in the hollowed back of the chair, and some padding under the thighs to contribute to the woman's comfort."

The seventeenth century finds the obstetric chair installed in an honorable place in the centres of medical erudition. As an auxiliary in childbirth, Jacques Duval (1612) recommends a chair of moderate height,  $1\frac{1}{2}$  to 2 feet, open both in front and behind, so that the midwife has un-

hindered access to the parturient woman. This chair should be provided with a sloping pillow, on which the patient can recline at ease and rest during the intervals between her pains; it should be upholstered or

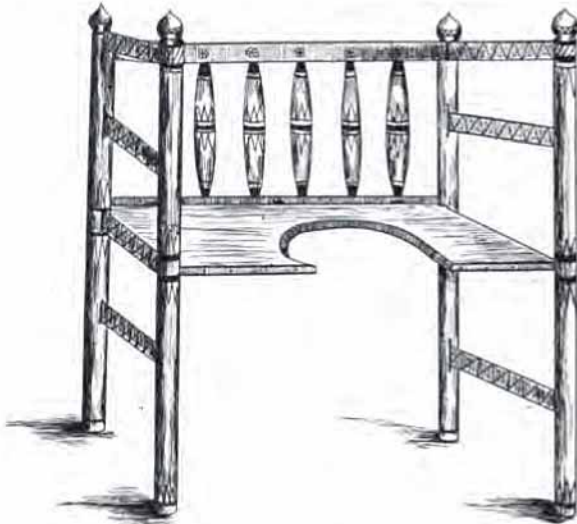


Fig. 6.—Obstetrical chair used in Oriental countries.

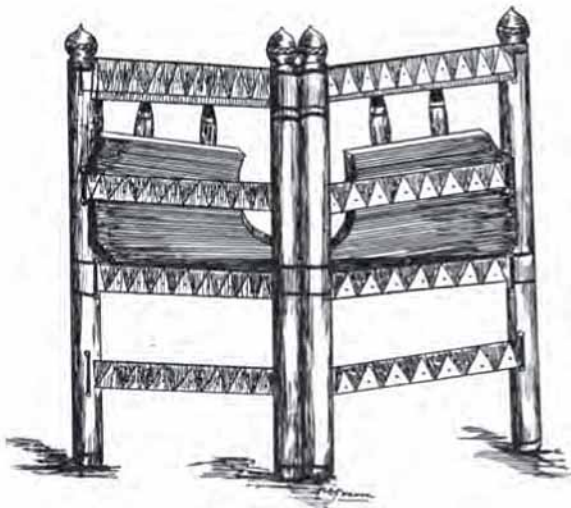


Fig. 7.—Same as in Fig. 6, shown folded for transport.

stuffed with cushions, so that the seat and thighs are comfortable. In front of the chair should lie a large cushion for the woman to kneel on when the pains begin; she may rest her hands on the chair and clasp it tightly while she holds her breath, thereby endeavoring to push the child down.

The obstetric chair was frequently employed by Flemish women in Belgium, in the eighteenth century, and the leading accoucheurs vied with one another to construct a chair of their own invention. The model of Dr. Herbiniant, about 1780, was distinguished by a foot board attached to the chair by leather straps; and a wooden insert which could be fitted into the concavity of the obstetric chair, after this had served its particular purpose. In Holland, the employment of the obstetric chair was at one time so entirely customary that this useful article formed part of the outfit for all fairly well-equipped brides. Englishwomen, in the eighteenth century, made use of a specially constructed wooden chair, with a seat scooped out in front, to facilitate the passage of the child.

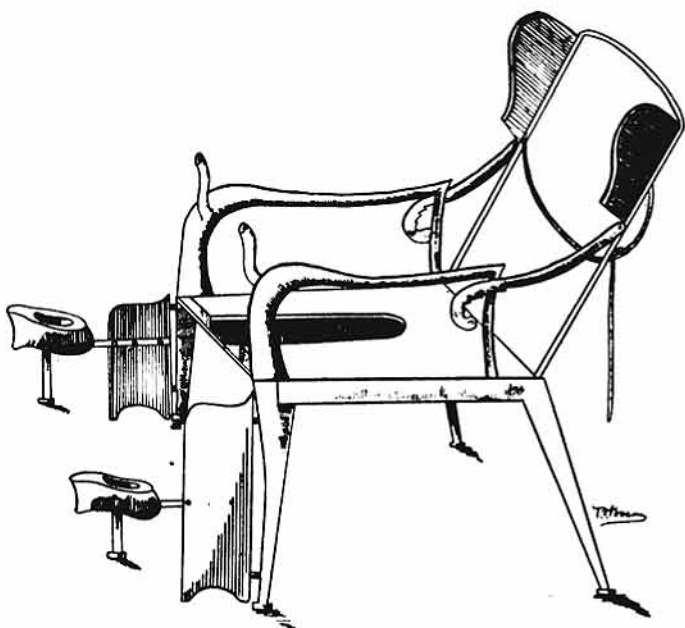


Fig. 8.—Stein's model.

From an originally very simple piece of furniture, the obstetric chair was developed, in the eighteenth century, into a more complicated contrivance by Deventer, whose so-called perforated chair was at one time very popular. This adjustable but somewhat clumsy chair was even provided with an arrangement to keep the occupant's feet warm, by means of hot ashes or sand bags.

Heister, in the eighteenth century, recommended the use in labor of seats analogous to Rhodion's obstetric chair. Stark, in 1791, advocated a model devised by himself. Stein, in Marburg, Germany, towards the end of the eighteenth century, extolled a rather complicated structure, of his own invention, which had separate parts united by hooks and hinges

so that it could be taken entirely apart. All the pieces including the pads, could be packed in a medium sized chest, to be carried about or sent to a distance. This chair could be adjusted at different heights, by means of an iron bar held in place with screws. It was provided with arm pieces or handles, and had a sloping footboard. The entire arrangement was



**Fig. 9.**—This and the remaining illustrations show different views of an obstetrical chair devised and used by the author.

such that the flexed legs of the seated or reclining occupant of the chair necessarily formed an acute angle with the thighs, thus enabling her to move and propel an extraordinary weight with a minimum expenditure of strength.

In the Western hemisphere the obstetric chair gradually fell into disuse although it survived sometime in rural communities of various countries.

At the present writing, the nations of the East are its patrons, and it is found in Japan, China, Greece, Turkey, also Syria, Egypt, and Palestine. In the last named country, according to Engelmann, it is still an honored institution, often seen in the humble form of an old fashioned arm-chair. In Syria, all self-respecting midwives own their obstetric chairs, built on the plan of a rocking chair, with arms and a seat scooped out in front, about two feet above the rockers, and cut out in a semi-circle. The wo-



Fig. 10.—Front view.

men of the Orient are also delivered in a special chair, the separate parts of which fold up like ordinary folding chairs. Among the wealthy, these seats are made of ebony and inlaid with mother of pearl. The midwife does her work kneeling in front of the parturient woman. The Cypriote midwives still make use of an ancient model of obstetric chair. Among the modern Egyptians, the midwife makes use of a chair "Kursee El Wiladeh" which is covered with a shawl, or an embroidered napkin, and some flowers



of the Henna tree, or roses, are tied with an embroidered handkerchief to each of the upper corners of the back; thus ornamented the chair is conveyed before the midwife to the house. (Engelmann, quoting from E. W. Lane, "The Manners and Customs of the Modern Egyptians," Vol. 2, p. 306).



Fig. 11.

In several Scherlis villages of Africa, a delivery chair is found, consisting of a block of wood which rests against a tree, at a height of about 3½ feet above the ground. Two stilts are driven into the ground on either side to serve as foot rests, and the woman makes her efforts at expulsion

while taking a firm hold of the ends of the stilts with both hands. It would seem to the author that this might almost be taken as the type of the primitive chair. Thus we see that from time to time as far back as authentic history goes, a chair of some form has been used by the women



Fig. 12.

of many nations for the purpose of assisting them in the more rapid completion of labor.

The author first became aware of the importance of posture in 1909 when Dr. Albert F. A. King of Washington read a most interesting paper before the members of the Alumni Association of the Lying-in Hospital

on the subject of the "Significance of Posture in Obstetrixes," and was greatly impressed with the soundness of his views upon the subject. He has endeavored ever since to apply the principles to private as well as hospital cases. In watching the women in the crying room of the hospital, it was found that many of them refused to attempt the squatting posture and that others soon tired of it and rolled upon the bed or floor, thereby losing all the benefit of the dynamic force exerted in a downward direction of the child's body. The result was that in looking about for a means of compelling the patients to assume the upright or squatting posture, the thought came that a chair might be improvised that would keep the patient in the proper position and at the same time be comfortable or as comfortable as any woman can be when undergoing the pains of labor.

The chair depicted in this article was made in the Hospital as an experiment and has only been used in a comparatively small number of cases so that no accurate deductions can be made. Already several modifications in its construction can be seen that will be advantageous, not only in making the seat and back more comfortable for the patient but also by allowing various movements of the parts so as to throw the weight either to one side or the other, or by tilting the chair cause the antero-posterior position of the child in utero to exert a more direct pressure in the opening of the cervix and along the axis of the pelvis.

The use of the chair it is believed will be most useful during the first and early part of the second stage and is not in any way intended as a delivery table, although it could be easily modified so that it could be used for both purposes.

The illustrations would suggest that a chair may be so constructed that it could be carried from house to house and thereby facilitate its use in private practice. In a later paper the results of its use will be tabulated, at which time its value will be more clearly shown.