

a pig is killed (and I imagine a pig presents the nearest approach as regards its skin perhaps in many others to a human being) to subject it to the action of boiling scalding water to remove the hair. I have seen some hundreds so subjected, as well as their being covered with straw and then being set fire to with the same object; but never, in any instance, have I known them having blisters containing fluid. I have seen legs of mutton and fowls, after having been either boiled or roasted, brought to table, and in some instances have seen blisters on them, but never, in any one instance, containing fluid.

Should any of your readers have an opportunity of proving or disproving the theory, I trust they will make it known. Having had no such opportunity previously, I based my opinion on the experiments made by Christison and others, and reported in *Taylor's Medical Jurisprudence*, chapter 38, and more especially pages 396 and 397. I am afraid I have taken up a considerable amount of your space, but the importance and interest of the subject will, I trust, plead my excuse. I omitted to say that some flannels were found in which the infant had evidently been wrapped, and that they presented the usual appearances. The woman was engaged to be married to a man who swore on the trial that he was not the father and did not even know the woman was "enceinte."

## Progress of Medical Science.

### ON NON-INSTRUMENTAL AIDS TO LABOR.

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*When may we, with Advantage, Rupture the Membranes before full Dilatation of the Os?*

Many a shrewd practitioner, with but little knowledge of the science, has acquired from experience very considerable skill in the art of obstetrics, more especially in many little details, whereby a normal but a tardy labor can be facilitated. Such experience, however, is blind and liable to error, until the scientific basis on which it rests is understood. Before even the science of midwifery existed, it was found that a change in the position of the patient was often very effectual in accelerating a lingering labor. Under such circumstances, it was a common resource to get the patient out of bed, make her kneel on the floor, or sit between a couple of chairs. This is often of great service, and a scientific explanation can be given why it should be so. But there is one condition where the labor is certain to be tedious, and where an ignorant midwife, or

medical attendant is very likely to try the above plan, with the result of only aggravating the evil. In this case, the cause of delay is a pendulous abdomen; and a knowledge of the normal axis of the uterus directs the attendant to lay the patient on her back and apply a binder. This illustration is a good example of a non-instrumental aid to labor, and also of the precision which is given to treatment by scientific knowledge, as compared with the blind, and oftentimes bungling actions of empiricism.

There are many ways by which an enlightened and experienced obstetrician can thus materially help off labor. Some, as the one referred to, are described in books; of others, no mention is made, but they are left to be acquired by experience; and more, the result of such experience is at times found to be entirely at variance with the principles laid down by the authors of our text-books. Such is the case in question which I propose to discuss on the present occasion: When may we, with advantage, rupture the membranes before the full dilatation of the os? I may mention that this question has reference only to normal labor, where the head presents, and there exists no contraction of the pelvis, but where the progress of the first stage is retarded.

As a part of the history of our art, it is interesting to observe how exaggerated were men's ideas regarding the importance of retaining intact "Nature's wedge," and how patiently and reluctantly former practitioners would wait, under the dread of being meddlesome, for nature to do what they could readily have done, even when convinced that the non-rupture of the membranes was the cause of the delay.

There is still remaining at the present day, much of the dread of having too early recourse to this simple operation. In the face of the fact that much and often long-continued ineffectual exertion is often due to the integrity of the membranes, even before full dilatation of the os, and the other fact that such ineffectual work is often productive of serious after-complications, there is certainly a want of discussion on this point in our recent works. Leishman speaks of it where there is unusual thickness and resistance of the membranes: "But before we decide on rupturing them, we should be sure that the proper function of the membranes has been effected in producing dilatation of the os." Playfair recommends puncture before completion of the first stage, only when the liquor amnii is excessive in amount; and renews the oft-repeated and considerably exaggerated caution: "If we evacuate the liquor amnii prematurely, the pressure of the head on the cervix might produce irritation, and seriously prolong the labor." This latter point is a question upon which the members of this Society might with profit express the results of their experience; in how far they have observed that irritation is produced, and the labor delayed, in cases where the membranes have ruptured, or been punctured before, early in the first stage. The term irritation is vague in the extreme, and conveys no definite idea to the mind.

Before entering on the discussion of our question,