means aid the expansion of the lower segment of the uterine walls. So long, therefore, as delay is associated with incomplete dilatation of the internal os digital interference should not be employed; but when delay is due to want of dilatation of the external os whilst the expansion and retraction of the internal has well advanced, we may expect benefit from artificial means. The degree of dilatation of the internal os I believe we can estimate by the condition of the upper portion of the vagina. When the former is complete the latter also is fully expanded and drawn upwards. If the external os has not been simultaneously dilated, the cervical tissue will be felt stretching across like a diaphragm, with a varying degree of thickness and resistance. If, however, the internal os be not fully dilated the upper portion of the vagina will be found lax and attached near to the os, or curving in towards it. Digital dilatation will then have no beneficial effect unless it be by stimulating the uterine contraction. But when the diaphragm is developed it will yield to judicious gentle manipulation; if the os be small by a rotatory action of the fingers; when once half-way dilated, and the head in actual contact, by support and gentle pressure of the lip in the direction of the occiput. A clear conviction should also be established that the cause of delay is in the cervical tissue only, and not due to want of rupture of the membranes, or to malposition of the head, to abnormal direction of the uterine axis, or to narrowing of the pelvic brim. Many cases of tardy dilatation are due to these causes, and of course cannot be aided by artificial dilatation.

By care in diagnosis the time when digital dilatation may be employed with advantage can be readily determined, and if practised as I have indicated, with due regard to the mechanism of labour, it may be employed with precision and safety. It affords material aid, increases the effective character of the pains, insures and facilitates the normal movements of the head, and if properly employed is free from all danger to the patient. It is a proceeding, therefore, which merits recognition at the hands of obstetricians, more than it has hitherto received. By extending our aid in the first of labour by watching and furthering the normal mechanism, I am confident that we may very materially lessen the frequency with which in recent times instrumental interference is deemed necessary.—*The Obstetrical Journal.*

ON SOME OF THE CHANGES IN THE UTERUS RESULTING FROM GESTATION, AND ON THEIR VALUE IN THE DIAGNOSIS OF PARITY.

BY JOHN WILLIAMS, M.D.

The author, after referring to the Wainwright murder, said that cases of a similar nature might unfortunately arise in which the question, "Has a given uterus taken part in the processes of gestation and parturition?" would become one of the greatest moment. The conditions which it was his intention to describe in the present paper were those which remained after the process of involution was over—say, the eighth week after delivery. The characters which usually supplied the data for the formation of an opinion on the question in view were not reliable, as any one of them might arise from other causes than pregnancy. The only certain marks, as he hoped to show, were to be found in the bloodvessels of the uterine wall. The arteries of the uterus underwent enlargement during gestation as well as the muscular elements of the organ, their calibre becoming increased, and their walls hypertrophied. After parturition their calibre became reduced owing to the contraction of the uterus, and the substance of their coats probably diminished; but they appeared to be affected by the retrograde process in a less degree than the tissues of the uterine walls generally. In a section of a uterus which had undergone involution, the arteries projected beyond the surrounding surface, presented thick yellowish-white walls, more opaque than the tissues around, and their canals remained patent. On microscopical examination, the connective tissue around the arteries was found to be increased in quantity, the arterial muscular coat was greatly hypertrophied, and the inner wall considerably thickened. The vessels appeared, moreover, more numerous than in the virgin organ. To estimate the exact value of these conditions in the diagnosis of the existence of previous pregnancy, three questions should be answered: (1) Was the condition described present in all uteri which had been gravid? (2) Was it a permanent condition? (3) Was it simulated by disease? Setting aside such rare and exceptional cases as those in which the uterus became