

reduced after parturition to a mere membranous sac, the author had found the characters he had described in all the uteri which had born children, which he had examined during the last five years. He had found them as long as fifteen years after the last pregnancy, and eight years after the cessation of menstruation, and under such circumstances their pregnancy, he thought, might be fairly inferred. He had never seen the appearances brought about by disease, and neither he, nor as far as he was aware, any other observer, had found them in the virgin organ. It must remain for further experience to decide the question whether similar appearances could be produced by the presence of a fibroid or other tumour. It could not indeed at present be asserted that the state of the uterine arteries described furnished positive proof of parity, but at the same time it must be admitted that it afforded the strongest presumptive evidence we possessed of that condition, while further research might show that it amounted to absolute proof of previous gestation. Passing on to the veins of sinuses of the uterus, the author said that these were all enlarged during gestation, but the enlargement was far more marked in that part of the wall to which the placenta was attached. Friedländer had investigated the condition of this part during the last two months of pregnancy, and found that at the eighth month many of the venous sinuses were surrounded by a wall 0.04 mm. in thickness; this wall contained abundant tolerably large nucleated cells in a clear homogeneous matrix, which became distinctly coloured by carmine solution. The contents of the sinus appeared to consist, not only of blood corpuscles, but also of a greater or less number of dark granular cells, containing two to five nuclei, one of which had the appearance of a vacuole. These, which were regarded by Friedländer as wandering cells from the decidua, at last completely filled the sinuses, and coagulation took place, the clots showing a net work of fine threads. Other sinuses, though not filled with these cells, also contained coagula at this period (eighth month). The author had only an opportunity of examining one pregnant uterus, but after delivery he had not unfrequently found clots with a network of fine

threads, though he had only rarely seen accumulation of large granular cells occupying the sinuses near the inner surface. At the end of four weeks, however, a great change had taken place. The walls of the sinuses at the placental site were much thickened, being due in part to a thin zone of connective tissue, within which was a granular glassy-looking transparent substance thrown into folds. The interior of the vessel was either entirely filled with these folds, or its centre was occupied with the organised remains of a clot, or a narrow lumen might still be left. The folded layer when torn by needles broke into particles of polygonal shape similar to some of the epithelial cells originally lining the sinus, and it appeared to be a distinct growth resulting from the proliferation of these cells. This condition had been found by the author, though somewhat indistinctly, twelve months after delivery. It might therefore be regarded as diagnostic of the previous existence of pregnancy; and when found justified a positive answer as to parity. It was true the structures described were not permanent, but they were discoverable for twelve months after parturition.

The President said that the thanks of the Society were due to Dr. Williams for his interesting paper on a subject the importance of which it was impossible to exaggerate.

Dr. Matthews Duncan expressed his sense of the extreme value of the contribution, and Dr. Playfair, while hesitating to pass any criticism upon the paper, said that he would not like the occasion to pass without bearing witness to the ease with which the changes described by Dr. Williams could be made out under the microscope. He did not doubt that when one had once had them pointed out to him, he would be able to recognise them again.

Dr. Savage asked if Dr. Williams was perfectly sure that what he had described might be taken as a precise criterion of parity.

Dr. Williams stated in reply that he regarded the appearances found in the sinuses of the uterine wall at the placental site as inimitable, and therefore diagnostic of previous pregnancy. With regard to the value of the condition of the arteries which had been described, further research was necessary before it could be estimated at its proper value.—*Obstetrical Journal.*