

value to those who cannot find leisure to consult more elaborate treatises on obstetric science." Dr. Winn has greatly enriched the work by his many excellent scientific and practical additions to the text. We would strongly advise every student to order a copy immediately through Dawson.

In the chapter on the placenta, the editor states that having had the opportunity of dissecting a portion of the uterus and placenta, taken from the body of a woman who died of hemoptysis, at the close of the last month of gestation, he has been able to clear up some points, with respect to the difficult question of the placental circulation. With the aid of Dr. Guli he made a careful microscopic examination of the various tissues, and, under a power magnifying 270 times, the following facts were clearly manifested: "1. That the falciform duplicatures of the uterine veins, commonly called sinuses, contained not only parallel, but *transverse muscular markings*, indicating a high degree of contractile energy. As these valve-like bodies are situated at the openings of the sinuses, they must exert a powerful influence in arresting the flow of blood when the placenta is separated from the uterus. 2. That a large amount of *elastic tissue* was combined with the muscular striæ, which also tend to contract the openings of the sinuses. 3. That the *obliquity* of the sinuses was very striking, and indicated an additional provision for arresting hemorrhage. 4. That many of the delicate filaments which are seen passing, from the placenta to the uterus, when these bodies are separated, were composed of looped capillaries, enclosed in a fine nucleated membrane. This membrane is probably a continuation of the chorion. These loops form as it were, villi and project, but do not open into the sinuses. They correspond exactly with the description given of them by Dr. Goodsir. 5. That the tissue of the placenta contained numerous oil-globules showing that this organ, at the close of gestation, has fulfilled its destiny, that it is effete, and about to be thrown off by a process similar to that which separates a seed-vessel from the parent plant.

By a careful deduction from the above facts, and the observations of Goodsir, Weber, Owen, and others, I think it may safely be inferred that the maternal blood enters the placental cells by the curling arteries of the uterus, and that the placental tufts project into these cells. From these cells the blood is returned by the uterine veins without having left the maternal blood vessels. The fœtal tufts are therefore bathed in the blood of the sinuses, and the blood of the fœtus is purified by a sort of action similar to that which obtains in the radicles or fibrils of the roots of a plant, by which nourishment is extracted from the surrounding medium."