

becomes less dense between the fourth and sixth week than the uterine structures on either side of it. The softening of this portion of the body of the uterus, at a point immediately above the cervix, is the essential fact in

HEGAR'S SIGN.

Hegar's sign, which has become familiar to the profession within the last few years, may best be defined as the compressibility of the isthmus uteri. Its location is the inferior segment of the body at a point just above the cervix, and it is especially marked in the mesial section. To be evidence of pregnancy with a living ovum, this compressibility of the tissues must be accompanied with the normal elasticity. While the compressibility of the isthmus is not equally well developed in all cases, it is always present in some degree during the second month, and when well made out is less liable to fallacy than most other signs of this period. It will be better understood in connection with Hegar's method, which will be described below.

Technique of pelvic examination.—Little need be said with reference to the method of examination for the pelvic signs of pregnancy. It is frequently impossible to fix and palpate the uterus satisfactorily with a single finger *intra vaginam*. With two fingers slightly separated the uterus may be readily balanced between them and the external hand, and may be explored with ease. The surrounding structures, too, are thus brought within easier reach.

When the fundus cannot be readily tilted forward within the grasp of the outer hand, as is sometimes the case in posterior misplacements, the lower segment may be explored by pressing the external hand down against the uterus in front and carrying the internal fingers well up into the posterior fornix. Again, by the use of the index finger *per vaginam*, and the second in the rectum, the entire posterior surface of the uterus may be reached and explored, as late as the second month and later.

In extreme cases, when the importance of the question is sufficient to justify it, the examination may be made under an anæsthetic, when it is otherwise impracticable by reason of undue thickness or rigidity of the abdominal walls, or other difficulties. Mere muscular rigidity, however, may frequently be overcome by requiring

the patient to breathe rapidly, or by gentle manipulation of the abdomen for a few moments, with a view to disarming the reflexes. It may be objected that all this is a troublesome matter, but the best results in practice are seldom reached except by taking pains.

Hegar's method is as follows: The index finger is passed into the rectum and carried just above the utero-sacral ligaments to a point opposite the isthmus uteri. The thumb of the same hand, passed *per vaginam*, rests upon the corresponding point in front of the isthmus. The tissues thus intervening between the thumb and the finger may usually, at about the sixth week or a little later, be compressed almost to the thinness of a visiting card. In difficult cases the rectum may first be distended with water to facilitate the introduction of the finger above the third sphincter, or the examination may be made with the aid of an anæsthetic.

This is Hegar's sign as obtained by his method. I have found no great difficulty, however, in most cases, in demonstrating to my satisfaction the compressibility of the lower uterine segment by the usual bimanual exploration. Forcing the uterus well backward and downward with the outer hand, the isthmus may be readily reached with the fingers of the other hand in the posterior vaginal fornix, and the compressibility or density of the lower segment easily appreciated.

The recto-vaginal modification of the bimanual above described serves the same purpose. The seat of Hegar's sign may thus be more easily explored—though, perhaps, not with the same precision—than by his manipulation. Or again, when the uterus is freely moveable, it may be gently drawn down with a volsella held by an assistant, and the isthmus thus brought within the reach of a finger of one hand in the anterior, and the corresponding finger of the other in the posterior vaginal cul-de-sac.

Causes of failure.—In a small proportion of cases the diagnosis is unfortunately beset with insurmountable difficulties. When all available means are utilized, however, failure can arise only from one or two classes of causes:

(1) Pathological conditions which may mask the pregnancy.

(2) Pathological conditions which simulate it.

In the presence of uterine fibromata, for ex-