

pleasant effects in the third. Therefore, I hope you will pardon me if I take up your time, to some extent, in considering these drugs outside the stage under discussion.

I have endeavored to give the opinions of standard authorities, and have also taken the trouble to write to a number of the leading obstetricians in the United States, more particularly with regard to the use of ergot and chloroform, and have received replies to all of my enquiries. This, I think, will perhaps make what I have to say slightly more interesting.

The time allotted to me is, I am sorry to say, entirely too short to give more than a short résumé of the subject. I, therefore, have only taken up for consideration the most commonly used drugs.

#### ANÆSTHETICS.

Firstly, what is the indication for them?

- Relief of pain;
- Relaxation of parts;
- Prevention of untimely movements.

In looking up the matter we find Donhöff, in the Archives for Gynæcology, shows the influence of chloroform upon the course of normal labor by the tachodynamometer to be as follows:

The administration of chloroform, even in diminutive doses, exercises a retarding influence upon the progress of labor. Time prevents us taking up his experiments fully.

Playfair, the English standard authority, says:

"The tendency of the present day is to give too much anæsthetic during child-birth, and a common error is the administration of chloroform to an extent which materially interferes with uterine contractions, and predisposes to postpartum hæmorrhage. In considering anæsthesia in the third stage, or the effects produced in the third stage, the subject would not be complete without referring to its use in the earlier stage of labor. Generally speaking, we do not think of giving chloroform until the os is fully dilated, the head descending, and the pains becoming propulsive. It has often been administered earlier, in order to aid in the dilatation of a rigid cervix, and while it may succeed well, chloral answers the purpose better. There is one cardinal rule to be observed: in giving chloroform during the propulsive stage, it should be administered intermittently and not continuously. When the pain comes on, a few drops may be scattered over a Skinner's inhaler. During the acme of the pain the patient inhales it freely, and at once experiences a sense of great relief. As soon as the pain dies away the inhaler should be removed. Indeed, if properly given, consciousness should not be entirely abolished, and the patient between the pains should be able to speak and understand what is said to her, or,

in other words, the chloroform should be administered to the obstetric and not to the surgical or profound insensibility, except, perhaps, just at the moment the head is passing over the perineum. The effect of the chloroform on the pains must be carefully watched. If they become materially lessened in force and frequency, it is necessary to stop the inhalation for a short time, until the pains get stronger. This effect may be often completely and easily prevented by using Dr. Sanson's mixture, one-third absolute alcohol and two-thirds chloroform, this diminishing the tendency to undue relaxation. Bearing in mind the tendency of chloroform to produce uterine relaxation, more than ordinary precautions should always be taken against postpartum hæmorrhage, in all cases in which it has freely been administered. In cases of operative midwifery, it is usually given to the extent of complete anæsthesia, and in all such cases it should be given by another medical man, not by the operator."

Winkel believes that chloroform should not be used in all obstetrical operations, unless they are of a difficult nature, and believes the best method even here in order to avoid difficulties is to carry the anæsthesia only so far that the patient feels the pains at the completion of the operation and awakens with the crying of the child.

Dr. E. Montgomery, Philadelphia, makes it a rule to give an anæsthetic to every patient during the second stage of labor. The anæsthetic he uses is the bromide of methyl, which has the advantage over ether and chloroform that it acts quickly and its effects pass off quickly, thus producing less influence than either ether or chloroform. It is not necessary that the patient should be brought so profoundly under its influence as is necessary under chloroform. He says: "I have never found it to have any unpleasant influence upon the third stage of labor, as is claimed to arise from the use of chloroform."

Dr. Parvin uses anæsthetics possibly in one-third of his cases, usually ether. He finds that it blunts the sharp edge of the pain, the patient bears down better, and it lessens the resistance of the soft parts. He believes that it neither induces hæmorrhage nor delays uterine contraction if given in moderate quantities, so as only to produce obstetrical, not surgical, anæsthesia. For prolonged operations he uses ether always.

Dr. H. J. Garriges, of New York, uses anæsthetics in every case in the second stage of labor, unless the patient objects,—generally chloroform. He considers that it is apt to invite want of contraction and hemorrhage. He considers ether safer if the kidneys, lungs and brain are healthy.

Dr. Wm. Polk does not use anæsthetics if he can evade it, and then only at the close of labor, never in pathological cases. He con-