

of these conditions, I had better review them one by one.

I. It must be scientifically applied. That is to say there must be no guesswork about it, no depending on the patient's impressions or the number of cells in the circuit. Some patients will make a great outcry, as if they were suffering, while no current at all is passing in the circuit, while other women will quietly endure a current of 150 milliamperes without a murmur. Then a battery which at one time will give out a current of 17 milliamperes per cell will at another time only give a current of two or three, so that applying 10 cells may mean all the way from 20 to 170 milliamperes. Therefore, unless a reliable and accurate instrument is employed to measure the current with, it cannot be said that it is applied scientifically. The strength of current necessary to cauterize varies in direct proportion to the amount of surface over which it is spread out. Martin, of Chicago, has ascertained by experiment that a current of 25 milliamperes traversing a positive platinum electrode of one square centimetre of surface, pressed firmly against the mucous membrane of an hypertrophied cervix, the circuit being completed by a large abdominal electrode, will produce a dry condensed condition of the tissue beneath the surface of the plate on the membrane in five minutes.

A catheter measuring one-third of a centimetre in diameter is consequently about a whole centimetre in circumference, and for every centimetre in length of such a sound at least 25 milliamperes of current are necessary for cauterization.

What are we to do in cases where for various reasons the patient can only bear 50 or 75 milliamperes? We must simply take the precaution to expose not more than two or three centimeters in length of such a sound. If the uterine cavity is longer than that, then it must be treated in successive sections on the same or on different days. By using carbon electrodes of de-

finite surface, we can regulate the strength of current necessary for cauterization, or by using flexible bougies covered with platinum, gold or aluminium wire over a certain extent, of which more will be said later, the same object may be still better attained. As the higher the current which may be borne, the larger the extent of intra uterine mucous membrane which can be dried up at a single sitting, it is very important to leave nothing undone that will render strong currents more bearable; this requires attention to three details:

1st. To have the cutaneous electrode as large and moist as possible. Thus a clay or bladder electrode measuring 6 by 9 inches will enable the patient to bear on the skin twice as much current strength as one measuring only 3 by 9, and a 9 by 9 will enable her to bear three times as much as a 3 by 9, and so on.

2nd. As the pain at the intra uterine electrode must be concentrated to a definite strength, namely 25 milliamperes per square centimetre of surface, in order to be effective, it is obvious that we cannot diminish the intensity and consequent pain without at the same time lessening the efficiency. In other words, pain at the cutaneous electrode is avoidable no matter how large the dose, while it will be present at the active or internal electrode whenever the intensity passes a certain point. This point varies, however, very much in different women in direct proportion to the degree of development of the nervous system. Some women will endure without complaining 150 milliamperes while others more highly nervous will hardly endure 25. In these latter women the best thing to do is to give them a small sprinkler bottle of the A. C. E. mixture in one hand, and tell them to smell it from their handkerchief doubled up in the other hand. You begin at zero and increase the dose gradually until she has become slightly under the influence of the anæsthetic but not unconscious, when she will easily bear the desired strength of cur-