Martin seems to be the first to attempt a definite system of exact dosage in uterine electrolysis. In this system he claims that all the beneficial effects of electricity can be obtained, in these cases, without using very strong currents, without resorting to galvanic-puncture, and without causing the slightest pain. He describes his system as follows:—

"Experimenting, I have found that a current of 25 milliampères, traversing a positive platinum electrode of one square centimetre 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 tissues beneath the surface of the plate in five minutes.

"This surface can be penetrated with a lance to the depth of a millimètre and a half without producing the slightest tendency to hemorrhage, and the tissues are denser than normal still some distance farther below the surface. Granting that the condition obtained in this experiment is what is sought in cases of hemorrhagic fibroids throughout the whole surface of the mucous membrane of the uterus, in order to prevent subsequent hemmorrhages, we can recognize a basis in the experiment from which we can construct a table of exact dosage, so far as the treatment of the hemorrhagic element is concerned.

"For by carrying our experiment still further it is found that a current of 50 milliampères is required, or just double the strength of the current required in the former experiment, to produce in the same time the same effect when the surface-area is just double, or two square centimètres. If, therefore, for example, we have a uterine canal that is ten centimètres in depth, and the electrode fitting the canal has a surface of one square centimètre to each centimètre in length, we would have 10 square centimètres of active surface in contact with the tissues; this, therefore, figured upon the same basis, would call for a current of 250 milliampères for five minutes in order to get the characteristic effects necessary to check hemorrhage from the whole surface. Or, the uterine canal that would require an Apostoli electrode 20 centimètres in length, and this depth is not infrequently met with, would require a current, if the electrode was 4 mm. in diameter, and if equal conduction took place from its entire surfac, of over 600 milliampère strength. This strength of current would not be tolerated in a large number of cases, and if it were, there is no means of being certain that the sound comes in accurate contact with the mucous membrane in its entire extent. There is some doubt, too, that a surface so large, even if it were in accurate contact, would conduct equally from its entire area; the consequences, therefore, in this case would be excessive cauterization and subsequent suppuration of portions of the mucous membrane, and little effect, if any, on other portions. It is this uncertainty of result and painfulness of application that I have succeeded in doing away with. This is accomplished by adopting a means by which the whole mucous membrane of a hemorrhagic uterus can be successfully treated in a number of *séances* by attacking successively different portions of it until the whole area has been covered.

"*Positive intra-uterine galvanism.* The connections have been well examined, in order to insure their security, and the insulating muff (Fig. 5, *a*) has been slid up to the cervix and fastened, the current from the generator is turned on very gradually until a current of 50 milliampères has been reached, if the active surface is 2 sq. ctm., and 100 milliampères if the active surface of the electrode is 4 sq. ctm. The current is then allowed to pass for five minutes, when it is gradually reduced, until it is entirely turned off. The electrodes are then carefully removed, and the application is finished. This first operation produces a coagulation of two or four centimètres, according to whether the active surface of the electrode occupied two or four centimètres of the distal end of the uterine canal. When the internal electrode is withdrawn, the depth of the uterine canal is noted, and this fact, together with the diameter of the electrode, is carefully noted in the records of the case for that day. At the next application, which can usually be as soon as the next day, before introducing the same electrode the intra-uterine portion of the instrument should be shortened by setting the rubber muff or gauge just the number of millimètres nearer the distal end that the active surface of the electrode measures