

the positive pole of No. 1 is connected with the negative of No. 2, and the positive of No. 2 with the negative of No. 3, and so on. The wires of all these couples are received by a very important but somewhat complicated machine called

2nd. A collector, by means of which you can gradually bring the strength of the whole battery to bear, one cell at a time. The collector has a double index, by means of which the first or any worn out cells can be thrown out of the circuit, as they would only hinder the others from doing their work.

3rd. The galvanometer, the most important of all, by means of which the dose is measured out in thousandths of ampères. For example, strychnine and atropine are very useful medicines, but they would be likely to do more harm than good if we had no scales with which to measure them; the galvanometer is to electricity just what a fine pair of scales is to strychnine. It is only since electricians have invented accurate galvanometers that electricity can be used effectively and safely.

I may mention for the information of some of your readers that the ampère is the measure of quantity, the volt is the measure of intensity, and the ohm the measure of resistance. To explain further these terms, quantity, intensity and resistance, I must compare electricity to water. Now, if you have a large quantity of water running over from a large flat basin, you would have quantity without pressure or resistance. On the other hand, a much smaller quantity of water confined in a very fine but very high tube would give great pressure without quantity; that corresponds with intensity in electricity. But if we have a current of water flowing through a very long and very thin pipe, we will have friction, which corresponds with resistance in electricity.

4th. A Gaiffe faradic machine, with long, fine wire coil, and short, thick wire coil and commutator. This is worked by two Leclanche couples.

5th. A platinum electrode, which can be converted into a Simpson's sound or a trocar, at will.

6th. A set of uterine and vaginal excitors or double electrodes.

7th. A large abdominal electrode, made of very moist potter's clay, on the upper surface of which is stuck a large, flat piece of zinc, and on the under surface a piece of coarse tarlatan to hold it together, and through the meshes of which the moist clay transudes.

This is the outfit; but I must explain that the positive and negative poles of such a battery have very different qualities; the positive pole, about which oxygen and acids accumulate, is like an acid caustic, coagulating and astringent; while the negative pole, about which the bases soda, ammonia and potash accumulate, is fluidifying and produces an action like the caustic alkalies.

Well, then, a patient mounts the table, she complains of losing blood continuously for several months, pain and weight in the back and belly; the sound enters $4\frac{1}{2}$ inches and a digital examination reveals a large fibroid in the posterior wall of the uterus.

Dr. Apostoli decides to employ a positive chemical galvano cautery to the uterine cavity. He first irrigates the vagina with 1 in a 1000 subimate solution, as I may say he does before and after every examination and operation, no matter how trivial, and then introduces the platinum sound right up to the fundus, the vaginal portion of it being covered with celluloid tubing, which is one of the best and cleanest of non conductors. In a few minutes, after gradually increasing the current until the compass needle marks 150 or 200, and even sometimes 250 milliamperes, the platinum sound becomes bathed in acid, which coagulates the blood in the uterus into so firm a clot, that it can with some little traction be withdrawn, and the hemorrhage ceases. Without the clay electrode on the abdomen, the skin there would have been burned with so strong a current, and until Dr. Apostoli thought of it, no one could administer more than 40 or 50 milliamperes. It being covered with a towel, and the patient herself pressing it down with both hands, the current enters her system by more than a thousand doors.

Apostoli used to never go beyond 50 milliamperes, but he made the seance last 10 or 15 minutes; but now that he can go as high as 250 milliamperes, he only makes the sitting last 5 minutes.

As soon as the hemorrhage stops, which it generally does after two or three applications or less, he goes for the fibroid, if it is in an accessible position, that is behind, or anywhere within reach through the vaginal cul-de-sac, but not if it is in front and high up, owing to danger of injuring the bladder. The way in which he goes for it is as follows:

An assistant presses the uterus backwards from the abdomen, while he feels for the fibroid with one finger pushed up into Douglas' sac, and with the right hand he plunges the trocar end of the sound