

the positive chemical galvanism will be used in the cure of aneurismal tumors and will give an albuminous coagulum. The attempts of Crussell and Wertheimer having failed to realise the idea of causing galvanism to act on urethral strictures, proved unprofitable. Their apparatus was imperfect, for the purpose of dissolving the peri-urethral engorgements, to which they ascribe the producing cause of the urethral contractions. The electrode of Mallez is a staff, terminating in an olive, or a cylinder, and it is covered, excepting at its point, over its whole extent, by a gum-elastic sound. This instrument is introduced by a conductor; its management is difficult. The author had the idea of furnishing it with a conducting sound, but for several reasons he gave it up. Dr. Jardin, his clinical assistant, had an instrument constructed under his own instructions, similar to the urethrotome of Maisonneuve—less the cutting blade—which was substituted by a rhomb of platinum, and had the catheter protected by a sheath of gum-elastic. This instrument is perfect; it acts well, and there is no fear of injuring the wall of the urethra. The author presented it to the Paris Academy of Medicine. In the course of the month of January, 1885, I tried some experiments, in which I employed the two instruments. I took a large piece of the muscles of the loin of an ox, containing a dense aponeurosis, which divided the piece into two portions. A tent-canula was introduced perpendicularly, making a trajet which merely gave passage to a canulated catheter of Jardin. I passed the lamina along the sulcus far enough to come into contact with the muscular texture. The positive pole of the pile of Gaiffe was placed on the muscle at a distance of 10 centimeters; the negative pole was placed in communication with the electrode. The circuit was made with the positive electrode. The distance through which the lamina had to pass was 8 centimeters, in reaching the aponeurosis at the centre. At the end of six minutes it appeared at the opposite orifice, having traversed the space without resistance. Now we know that aponeurosis is a hard, fibrous composite of bundles of laminous and elastic fibres, which interlace and form a compressed web, sufficiently resistant, and comparable to the fibrous texture of the urethral stricture. The same experiment was made with the instrument of Mallez, which gave the same result, but not so promptly

as the lamina of platinum. Another fillet of muscular fibres and aponeurotic tissue was encased by the metallic wire of our polypotome electrode, which is a modification of the constrictor of Maisonneuve, establishing the electric current; the primitive (positive) pole was put into communication with the instrument, contrary to the first experiment, and the negative pole with the muscle, thus making the circuit. The experiment lasted 40 minutes; the wire became lost in the muscular texture and the tendinous parts, but desiring to hasten the result, I broke it. In proportion as the wire decomposed the textures, a fume of sour and piquant taste was formed, coincidently with the liberation of the gases; this fume was quite saponaceous at the negative pole. From the dissection of the parts traversed by the electrode the disorganization of the textures was exhibited, and we were satisfied that positive chemical galvanism, by the process employed by us, is an incontestible fact, which can be realised by any physician. We employed this process in the extirpation of an extra-uterine polypus, before we had seen the book of Tripiér—*Electrologia Medica*—which we received a good while afterwards.

Dr. Fort, when acting as a clinician in Rio de Janeiro, relative to failure in an operation by electrolysis, published in the *Gazette des Hôpitaux*, of Paris, No. 54, an observation which we here introduce, together with the reply of Dr. Jardin, because they are both very instructive. Dr. Fort says, "since I practised chemical surgery in Brazil, I have operated a considerable number of times on strictures of the urethra. I employ *linear electrolysis*, on a large scale, according to the process of Dr. Jardin. In the present instance I would ask Dr. Jardin whether his instrument might not be modified, with the view of avoiding all possible failures? The lamina of platinum, not cutting, which destroys a point of the stricture, appears to me too small, and I think it might, without inconvenience, be enlarged in its depth to the extent of 3 millimetres. I deem this necessary, considering the thickness of the canal of the urethra and its relations with the corpora cavernosa in the upper part." The following are Dr. Fort's reasons given in demonstration of the utility of a modification of the lamina:

1st. In certain individuals the stricture presents some thickness of pathological texture, connected