

with some dilatability of the strictured point. What happens? It is the fact that the electrode, whose lamina is not sufficiently projected, does not destroy linearly more than a part of the thickness of the pathological texture. After the operation a number 18 sound, of the scale of Charriera, is passed through, but sometime afterwards the old undestroyed tissue contracts anew, and thus is lost the benefit of the electrolysis, which ordinarily gives place to a soft, neurotractile cicatrix." Dr. Fort has observed several analogous cases, and he says that they are recognised by the reproduction of the stricture, which may be expected in a few months. "Let us then," he writes, "elevate the lamina of the electrode." "The *ecraseur*, combined with the chemico-galvanic cautery—a lacing of metallic (iron) wire, conducted by an isolator," says Tripiet, "forming one electrode of a current whose circuit proceeds to closure in the vicinity—will operate simultaneously by crushing and cauterization. In the ablation of uterine polypi, for example, the *ecraseur* will be the positive electrode, in order to diminish the possibility of hemorrhage; in the ablation of pediculate hemorrhoids, it will be the negative electrode, in order to diminish the retractile tendencies of the cicatrix." That we may not be accused of plagiarism, this point calls for rectification. We have said elsewhere that Nelaton, in 1864, operated in this manner on a naso-pharyngeal polypus, but he availed himself of an apparatus consisting of a canula of guttapercha, containing two needles in its interior, which he implanted in the body of the tumor. The process employed by us is different. Reflecting on the result obtained by the rhomboid lamina of the electrolyser of Jardin, on stricture of the urethra, and considering that decomposition is made rapidly, without pain and without hemorrhage, we entertained the idea of extirpating this polypus by electrolysis. Some physicians, among whom is one of my friends, doubted the result. There stand the words of Tripiet to convince them, once for all, of the reality of the process. Some also have doubted the action of electrolysis in urethral strictures, thinking that instead of decomposition there is divulsion, which in the hands of able surgeons has given excellent results, according to the reply of Dr. Jardin to Dr. Fort, when this surgeon said he had decomposed a stricture of the urethra in 25 seconds! Dr. Jardin affirms that in this short

period of time electrolytic action does not come into existence.

2nd. In certain patients the stricture is short, probably not very thick, and possessing great elasticity. The lamina of platinum of the electrode traverses the stricture from before backwards; afterwards it passes, on withdrawal, in the inverse direction. The patient urinates better for some days, but relapse follows. If, in this case, the lamina were more elevated, a certain degree of tension would result in the strictured ring, and chemical destruction would be produced. Mr. J—— came to consult Dr. Fort in May, 1883, about a short stricture which allowed a number 9 sound to pass. "I treated it" he says "with the linear electrode of Dr. Jardin. During some weeks the patient was better. The symptoms became worse, and the stricture attained such a degree that it did not admit a No. 4 sound during the night of Friday. On the next morning the patient introduced a No. 6 sound. On Sunday morning I passed into his urethra a No. 8 sound, and left it in for an hour. Afterwards a No. 9 sound, during half an hour. I next passed a conductor and the canulated catheter, which fortunately reached the bladder. The lamina of platinum of the instrument of Jardin was applied against the strictured point, and the circuit was made. The operation lasted twenty-five seconds. I employed 18 elements of the pile of Gaiffe, making slight pressure on the ivory button of the electrode. The flow of urine is large enough, and everything leads to belief in the absence of reproduction" (of the stricture).

In our own operations we always avoid making pressure on the ivory button of the electrode in order to procure the decomposition of the pathological texture by the proper action of the chemico-electric current. Afterwards, and always when the lamina has passed rapidly, we take care to delay it at the level of the point of stricture, so that the contraction may be attacked both in front and rear.

PART SECOND.

CHEMICO-GALVANIC CAUTERIZATION WITHOUT A CONDUCTOR, OR ELECTROLYSIS BY THE PROCESS OF JARDIN.

"Traumatic strictures of the urethra justly pass as incurable," says Dr. Jardin. In reality we must