

Charles Phillips (1811-1870), a famous urologist, born in Liege, and yet unknown in that city

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SUMMARY : Charles Phillips was born in Liege at the beginning of the XIXth century. In that city, he studied medicine and, later, lectured, during a few years, initially, at the School of Medicine, and, later, at the School of Veterinary Medicine. Having trained in several European centres, he settled in Paris where he soon became a well-known urologist. Remarkably intelligent and inventive, he was also a great medical artist; he produced some wonderful books and invented several devices that are still in use today in basic urology. Surprisingly, his name is almost unknown nowadays in his city of origin.

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Charles Phillips, the son of an industrialist, was born in Liège on April 30, 1811 and died in Paris on December 19th 1870, as a result of endocarditis secondary to the effects of rheumatic fever. His portrait, by Couture (1849, Fig. 1), is conserved among the art collections of the University of Liège.



Phillips had an interesting life; he had three consecutive nationalities. In 1795, the Principality of Liege was attached first to the first French Republic (1795-7815) and then it became part of the Kingdom of the Netherlands (1815-1830), before becoming part of Belgium. Charles Phillips was successively French, Dutch, and finally Belgian.

He went to school in Liege showing early promise. At the age of fifteen, he composed a comedy called the "Exaltation against the theater of society."

He studied medicine in Liege. Remember that in the early nineteenth century, the medical school was formed in Liège under the French regime. On the initiative of William I of the Netherlands, the University of Liège was founded

on September 25th 1817, with a medical school. This moved into the former headquarters of the Jesuit school where the chapel became the Academic Hall, a listed building it was restored in 2005.

Charles Phillips obtained a PhD from the University of Liège on May 18th 1833. He attended the Paris hospitals from 1833 to 1835 and also went to Berlin, to the Charité Hospital run by Johann Freidrich Dieffenbach, professor of clinical surgery, promoter of the technique of dividing the eye muscles to treat strabismus and the Achilles tendon for club foot .

In 1835, the Faculty of Medicine of Liège has six teachers including a professor of surgery and two lecturers. There was also right next door, a school providing several free and open courses. Charles Phillips taught surgical anatomy and operative surgery. He wrote a treatise on Operative anatomy (" Amputations dans la contiguité des membres" (1838)) for which he designed sixteen illustrative plates. This atlas remained a standard reference for many years.

Unable to satisfy his desire to teach at the Faculty of Medicine, Charles Phillips went first to the Belgian school of veterinary medicine founded in Liège in 1831, he became interested in the anatomy of the horse and discovered a new muscle, accessory extensor side of the finger, which he called "small cubitopréphalangien." This muscle is from the name of muscle in the Phillips specialized treaties relating to the horse. It presents at the Academy of Sciences and Belles Lettres a remarkable atlas of equine anatomy, which includes 40 color plates of which he is the author. From 1835 to 1838, Charles Phillips taught in the veterinary school, the anatomy of humans and domestic animals. From 1839 he was responsible for general and descriptive anatomy and physiology. This school was abolished in 1840 when the state created the Veterinary School of Cureghem, which was transferred back to Liege at Sart Tilman in 1991.

In 1840, Charles Phillips went to St Petersburg where he practiced several subcutaneous tenotomy operations, especially for the treatment of strabismus. The following year he was invited by Lisfranc, a student of Dupuytren and head of service of the Pitié, to make some operative demonstrations in its amphitheater. It was then that published his treatise "On the subcutaneous tenotomy" (Paris, 1841), which was translated into German.

He settled in Paris moving to the rue de la Victoire in the rich and fashionable Chaussee d'Antin neighborhood. During this period he studied especially subcutaneous tenotomy and urinary tract disorders. In this latter field he quickly acquired a high reputation: it operates in St. Louis and at the Hotel Dieu. He published in 1849 in the Atlas of Journal Medical and Surgical Knowledge, "Les opérations qui se pratiquent sur les organes génito-urinaires" a true masterpiece that shows talent and mastery gained by the author. This book was reprinted in 1992 on the occasion of the 57th Belgian Congress of Urology.

In Paris, Phillips taught at the School of Medicine where he gave a series of free courses. According to the National Archives section of the nineteenth century, between 1857 and 1862, he was responsible for teaching the diseases of the urinary tract. In 1860, he published his "Traité des Maladies des Voies", which can be now download in its entirety on Internet, from the search engine Google (book search). The first part of this book is devoted to diseases of the urethra; the second, diseases of the prostate and bladder, and the third to calculous disease, for lithotripsy and extraction without operation bloody, foreign bodies introduced into the urinary tract. It is in this Treaty, real monument, which the author describes the knowledge urologic the moment and it brings many details and nuances of fruit his great experience and made several innovations, especially in the field of and expansion of the survey.

Lead bougies were known since antiquity, and regularly used since the 16th century. Mayor of Lausanne proposed in 1836 the forced dilatation with foam-topped rounded tin bougies, with a caliber of 4 to 9 mm. This treatment modality was a real breakthrough compared to the repeated dilatation using flexible bougies. Treatment was fast, but the pain could be atrocious and fistulation common, leading sometimes to dramatic consequences.

Phillips was interested in these metal instruments. In 1837 he had made, by a Liege jeweler, narrower tin bougies smaller than 4 mm. A year later, the manufacturer himself benefited from the passage of these valuable instruments! In 1839, Phillips proposed a quarter-scale mm and used instruments with a lesser curvature. Subsequently, Béniqué in 1842 split the industry by the twelfth of a millimeter, then the sixth, and increased the curvature. These instruments are nowadays indispensable for urologic practice.

Phillips is also studied retention of urine produced by narrowing of the urethra. At the time, the obstacle was confirmed by an exploration using a small rounded bougie. In difficult strictures Phillips used filiform bougies whose tips were bent in a spiral (invented by Leroy d'Etiolles). This configuration allows, the bougie once at the stenosis to slide easily into the bladder. The bougie is left in place for a few minutes, then it is removed. This maneuver is usually accompanied by small voids that relieve pain. It is usually repeated several times. Therefore, to avoid having to remove the candle with the risk of not finding his way and being forced to make a possible bladder puncture, very dangerous move for the time, Phillips used, from December 1858, a sound with a threaded tip (Fig. 3) :

"This device consists of: 1) a probe of 1 to 2 mm in diameter, straight, flexible, or with a tapered end, which is adapted to securely screw in a trough (B), 2) a filiform bougie carrying at its end a manual metal ring (A), ending no protruding screws, can become lodged in the screw, hollow probe, 3) and a mandrel brass wire. When we managed to get the plug conductive, it is screwed onto the flexible probe, after having introduced the mandrel is pushed slowly conducting candle, which comes and curls up into the bladder, and finally, the probe following the footsteps of the candle, enters the body:

the mandrel is removed, placed in the probe, which gives passage to the urine.

When fully elapsed, the probe is brought slowly out of the channel, and having unscrewed, the plug is left in the urethra conductive in order to drain the urine at will. It is rare that this operation must be repeated several times, the stay of the candle for a few hours into the urethra usually sufficient to alter the bodies, then leave out the urine, and enter the instruments to facilitate evacuation. This device, very simple, was very helpful. "

Dissemination of its survey method with all the driver has spread faster than Phillips had a real vocation as a teacher and, unlike many others of the time, he felt a real pleasure to fully demonstrate its know-how.

Phillips had all the qualities of a great master, brilliant intelligence, creativity, a great teacher, operator and talented lithotomist, wonderful artist (Fig. 4), and, moreover, a great diplomat showing courtesy to the unique respect of all his colleagues at the time, some of which no longer spoke, but did not hesitate to exchange insults through the medical papers.

Charles Phillips, in his lifetime, received numerous honors in both Belgium and France (Honorary Fellow of the Royal Academy of Medicine of Belgium, a knight of the Order of Leopold and the Red Eagle of Prussia and Officer of the Legion of Honor, etc.). He attended assiduously the world of artists and men of letters.

He was, without doubt, one of the biggest promoters of urology in France at that time, and left to posterity many treaties and publications (Table I) as well as sounds and bougies that are still used today with Phillips name (or, more often Philips), and these instruments are still part, at present, the basic material of the urologist.