In this series of articles I am going to show you some of the exhibits contained in the BAUS Virtual museum of the History of Urology which is part of the BAUS website (www.baus.org.uk).

In the last article I asked why we size catheters using the French scale.

You will have noticed that we size catheters and other instruments in urology using units called ‘French’. A size 16 catheter is often described as 16Fr; equally, this may be written as 16Ch. The ‘Ch’ stands for Charrière and Charrière was Joseph Frédéric Benoît Charrière (1803-1876) a famous Parisian master cutler and surgical instrument maker (Figure 1). The number represents the circumference of the instrument in millimetres. This is sometimes also defined as one third of the external diameter (given that $\pi$ is about 3, this is about right if you recall that the circumference = the diameter multiplied by $\pi$). Figure 2 shows two Clutton sounds sized 16Ch to 20Ch and 16Ch to 22Ch.

Joseph Charrière was born on 19 March 1803 in Cerniat in Switzerland but moved to Paris as an apprentice to a cutler. Although his father was a bank clerk in Paris, his uncle was a cutler back in Cerniat. Within four years he was a master cutler with his own business. He soon became recognised as an excellent surgical instrument maker and became the personal instrument maker to Baron Dupuytren, chief surgeon of the Hotel Dieu Hospital.

Charrière was not only a great craftsman but also an innovator as well. He devised and improved many medical instruments. He designed the crossed leg type of artery clip, modified the ether mask and worked with Jean Civiale’s blind lithotrite creating the split locking nut which dramatically improved its ease of use (Figure 3).

In 1836 Charrière became a French citizen. In 1843 he was made a Chevalier of the Legion of Honour. He died on 28 April 1876 in Paris.

These articles are often about famous urologists and surgeons of the past and it’s easy to forget that urologists cannot function without allied professionals and craftsmen such as Charrière. The next article will be about two men who completely changed modern urology and the way we view our world (literally!), neither of them were urologists.