

## **A BRIEF HISTORY OF THE LOUIS LOT FLUTE**

In this article I will give a brief overview of the famous Louis Lot flute.



Boehm's flute system had matured into what to a large extent is modern flute by 1848. The flute was still a closed hole instrument it however incorporated the large tone holes developed by Nicholson and was of a covered hole mechanism. The two major differences were that it did not have open holes, that it had Boehm's two piece thumb key and also was an open G# flute. This latter point may have been the way it should have stayed.

At that point in time an instrument maker of good reputation named Godfroy was working in Paris. He had purchased the French rights to manufacture Boehm's flutes. Significantly his son-in-law was the famed Louis Lot who set up flute manufacture on his own in 1855.

There is much myth and opinion about Louis Lot's work but what he essentially did was the following:

1. Lot took the ring key system developed by Nolan and Pollgeisser and developed it into the famous open holes which are to be found on the majority of flutes in the modern period.
2. Of great interest is the fact that Lot adopted a different metallurgy. His flutes were not made out of coin silver (900 out of 1000 parts fine), nor sterling (925 out of 1000 parts fine). Instead he went to 958 silver, known as French silver, also more correctly known as Britannia silver. This silver derives from a jewellery standard used in England from 1697 – 1719, to discourage the melting of sterling coins for jewellery use. The Britannia standard is still a legal standard in the British Commonwealth.
3. Lot in making his flutes did not draw one piece tubes. Lot took a flat sheet of silver, beat it around a mandrel to make it round, soldered a seam in it and then drew it to make the tube accurate and even. I've often wondered why he did this. Did he know something about sound or was it an easy way to work? Working with soft, dense silver would bend easily around the mandrel and then harden well with the hammering and drawing process. I am not certain if it was intentional but it certainly works.

4. What I am certain of is that this method of building a flute gives a deep, rich sound which while dark and focused, has a luminous quality to it, and for this reason the French flutes have retained their fame over many years. These old flutes were built to pitches of around A435 so the ones that we see in the modern era, if they are playable at modern pitches, have been rebuilt. This is the moving of the tone holes to accommodate pitch frequencies of 440 to 442. This enables them to be played in tune.
5. A criticism of Louis Lot is that in my view his mechanism was very poor. The keys are very small and very light and do not have adequate mass to make a smooth keyword system. The outcome of this has been that most of the Lot flutes which one sees today have had new mechanisms fitted. By way of example I recall discussions with Trevor Wye in 1997, he had a Lot which had a new mechanism fitted by Altus. Equally when I met with William Bennett in 1987 the Louis Lot which he owned had another mechanism fitted, and was still troublesome to such an extent that the flute had try-steels in, notwithstanding the fact that he was playing a concert at the Wigmore Hall. (Try-steels are removable axles which do not screw in, which enable a flute technician to remove keys quickly to adjust the padding.)
6. A further point which I must make is that in my experience one of the methodologies in the French school is to play complex passages, particularly third register passages by learning a percussive rhythm in which keys are then opened and closed. This was demonstrated and taught by the late Lucien Grujon, Paris Conservatoire First Prize 1939, and a life long friend of J.P. Rampal. In my view this is the consequence of the light keyword of the flute which doesn't have sufficient mass. Furthermore the Lot pad cups are very thin and give inadequate support to pads which is why they are usually rebuilt with a new mechanism.
7. An empirical comment on the flute is that I think what happens with the 958 silver which is seamed and then fitted with soldered tone holes is that not only is this metal more dense than normal silver, that the hand-working and drawing process compresses the material still further and that in addition we know that silver age hardens, and that both the construction and the age of the flutes have something to do with their superb colour and response.

These instruments are of course very rare and are not often found and sometimes have been destroyed by inexperienced efforts to retune them and rebuild them, however where you find a good Lot it is worth a considerable sum of money, and I recall seeing a very good Lot returned with its original keyword on sale in London in 2001 for £9,000. In South African terms R135,000 or in US terms \$18,000. These are prices approaching what one would pay and sometimes exceed gold flutes. Clearly a very good flute to fetch a price of this nature. On his recent visit to me David Straubinger told of a Lot rebuilt and restored to original condition, which sold for \$35,000.00.

8. My personal experience of Louis Lot flutes is limited to the flute played by my teacher Albert Honey. He had an old plated Lot as one of his flutes, which was a treasure and which had been retuned by Nick Crabb who did a magnificent job to the extent that the seams where patches had been soldered into the tube, could

not be seen. The flute had then been re-plated with a now outlawed mercury process.

9. I also had a Louis Lot which I acquired in 1994 which I traded to William Bennett for his version of the modern Louis Lot built by Altus, a Model 1607 open G#, built for him as a demonstrator. I'm not sure who received the better part of the deal, he or I. I am very happy with my modern Lot (Altus).
10. Given the scarcity and price of Louis Lots in the modern world, what can one do to obtain one? There is of course an alternative, and in this regard Altus has a range of flute options, and the closest to the Louis Lot being Model 1607 which has a 958 silver tube, and the Altus Limited Model AL which has a 946 silver tube. I think they have done something else to the AL, I'm not sure what it is but it is the most unbelievable flute.

These flutes and their cousins like the Model 1307, all silver flute with 958 tube have a wonderful sound and response. While not immediately obvious when in particular the 1607 and AL flutes are first played, but when played for a while it is perceptible that they have a tonal centre that few other silver flutes have and that they have a large dynamic range. Over and above all of these things, the sound is natural and the flautist doesn't have to work to force the sound. I believe they are a fitting tribute to the work of Louis Lot and that we have much to be thankful for, that flutes of this nature are still available.

My current project is the building of seamed heads and in due course I will contemplate building a complete seamed flute. I do not know that I will be able to match the quality of an original Lot or the top models from Altus, however the challenge must be taken up.

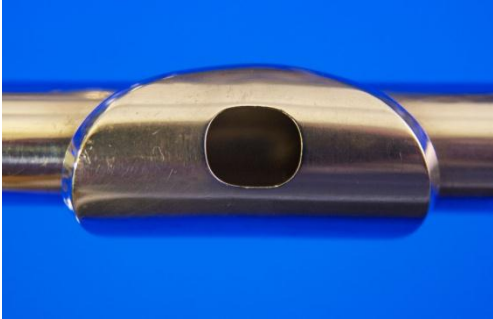
Author: Michael C Botha. The author has asserted his right to be known as the author of this work.

## Headjoints with thanks to Mogens Friis of Lyngby, Denmark

**Louis Lot**

**#: 7388 Year 1905**

Embouchure 9.9 x 11.9 mm. Chimney 4.56 (lower wall) and 4.80 (upper wall). Tube .012".



**Louis Lot**

**#: 4884 Year 1890**

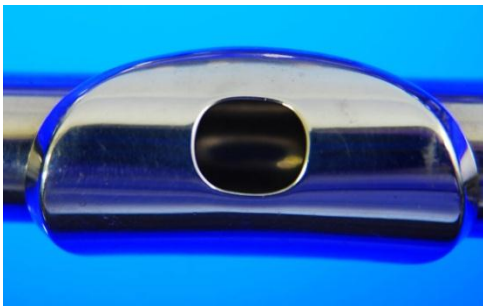
Embouchure 10.0 x 11.7



**Louis Lot**

**#: 3792 Year 1884**

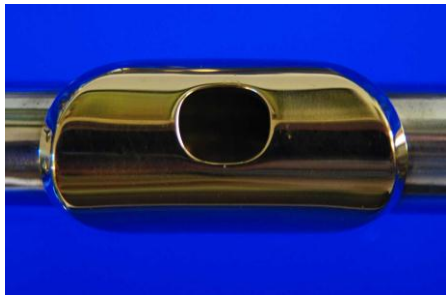
Embouchure 11.93 x 10.06



**Louis Lot**

**#: 7544 Year 1906**

Embouchure 11.9 x 10.2. Chimney 5.2 on both sides



**Louis Lot**

**#: 7816 Year 1908**

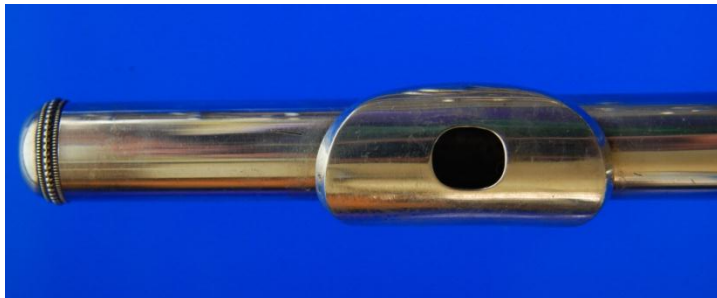
Embouchure 11.81 x 10.06 mm. Chimney front 5.2 and 4.8 back



**Louis Lot**

**#: 6434 Year 1898**

Embouchure 11.9 x 10.0. Riser 4.22mm/ 4.39mm. Tube thickness .014



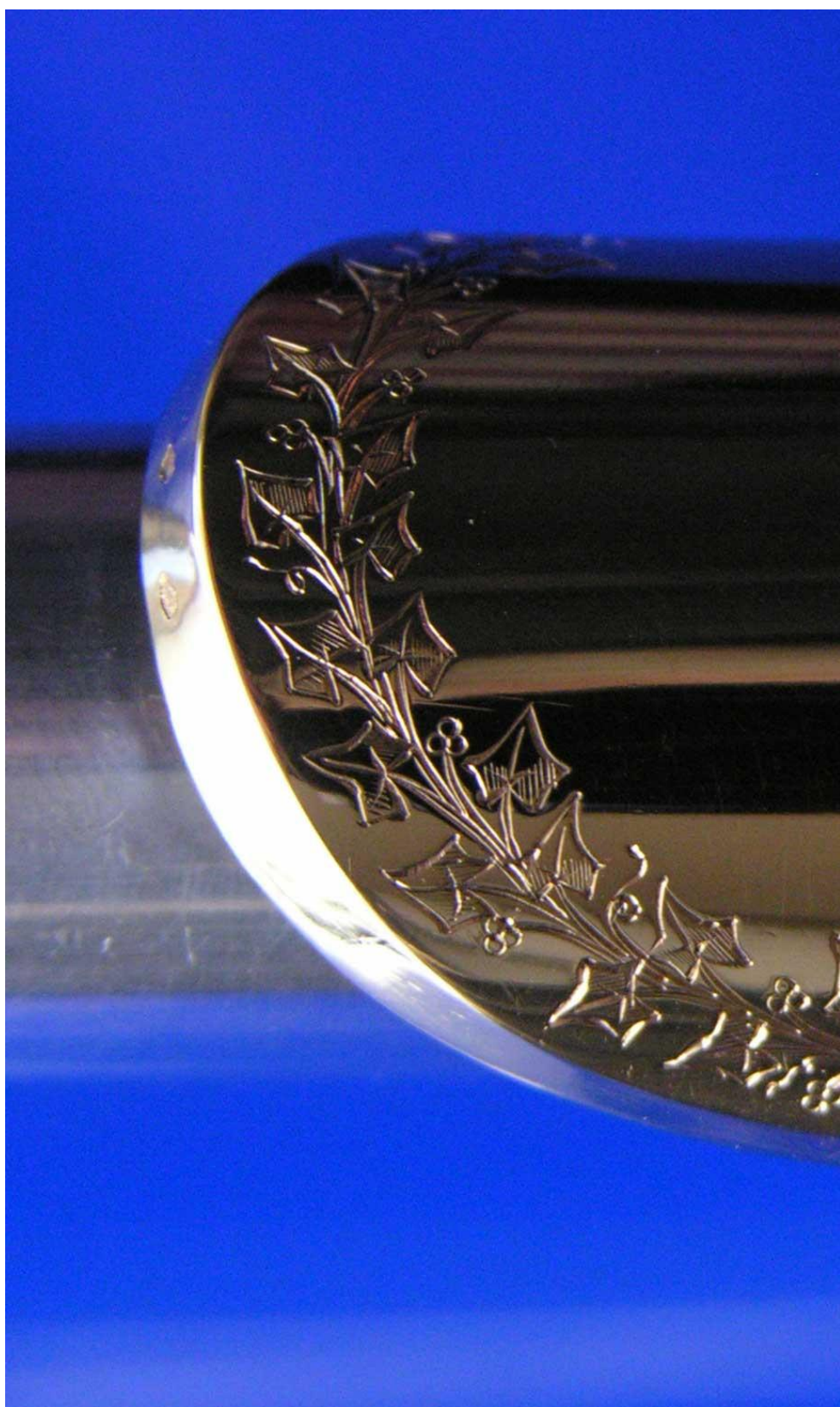
**Louis Lot**

**#: 6764 Year 1900**

Embouchure 9.9 x 11.7 mm.



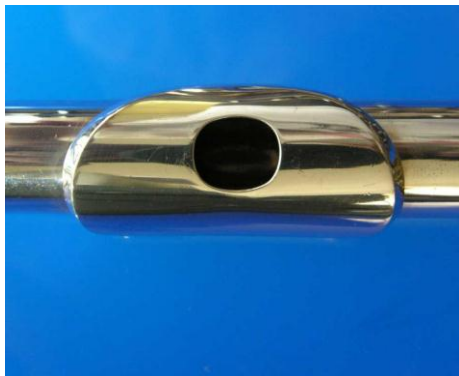




**Louis Lot**

**# 4166 Year 1886**

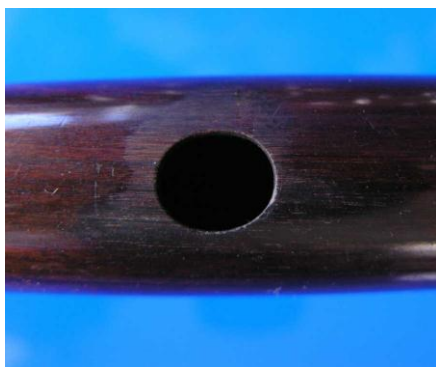
Embouchure 11.78 x 10.06. Strike wall 7,0 Chimney 4.6



**Louis Lot**

**#: 3541 Year 1886**

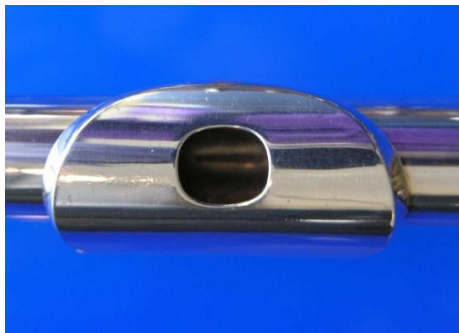
Embouchure 11.91 x 10.03.



**Louis Lot**

**# 1125 Year 1867**

Embouchure angle 7. Emb. 11.91 mm x 10.1 mm. Chimney high 5.2





**Louis Lot**

**#: 3952 Year 1884**

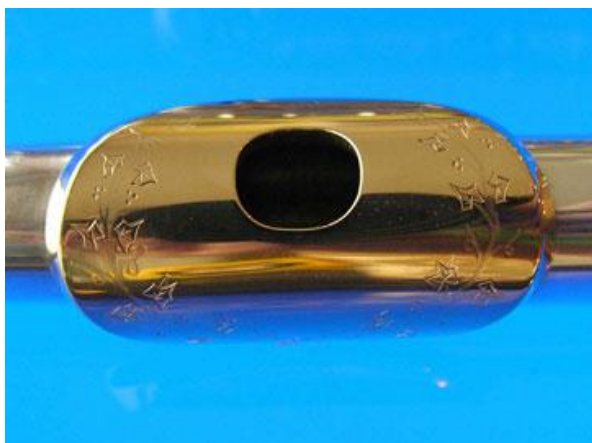
Embouchure 12.9 x 10.4 mm



**Louis Lot**

**# 3340 Year 1882**

Embouchure 11.8 x 10.1 mm. Chimney 4.9 mm. Wall angle 7 degrees.



**Louis Lot**

**# 4676 Year 1889**

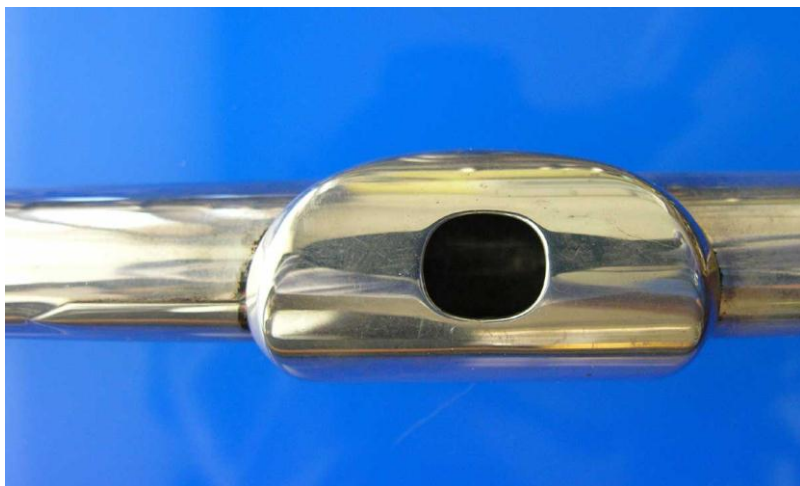
Embouchure 10.2x11.9 mm



**Louis Lot**

**# 281 Year 1858**

Embouchure wall 4.7 mm. Emb 11.75 x 10.2



**Louis Lot**

**#1804 Year 1876**

Embouchure 10.4 x 12.5 mm



**Louis Lot**

**#1869 Year 1867**

Embouchure squared 10.3 x 12.3



**Louis Lot**

**#5669 Year 1910**

Wood emb 10.7x 13. Silver 10.2 x 12



**Louis Lot**

**#1584 Year 1871**

Embouchure 10.4 x 12.4 mm. Chimney 5.1 mm



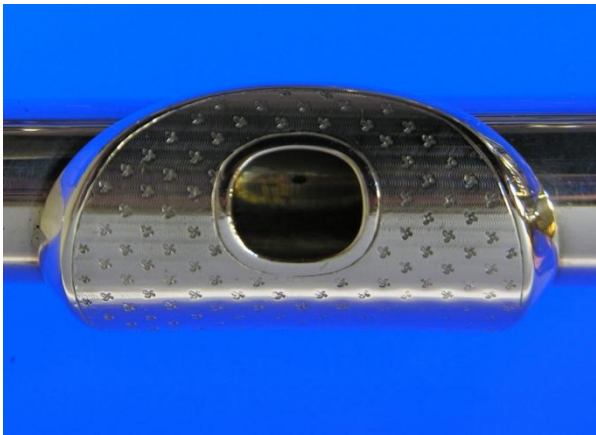
**Louis Lot**

**# 3314 Year 1882**

Embouchure 11.9 x 10



**Louis Lot**  
**# 742 Year 1863**  
Embouchure 10.2x11.78



**Louis Lot**  
**# 2054 Year 1875**  
Embouchure 11.05x10.09mm





**Louis Lot**  
**# 6002 Year 1896**



**Louis Lot**

**# 6944 Year 1902**

Embouchure 12x10mm (oval).



**Louis Lot**

**# 2722 Year 1879**

Embouchure 11.93 x 10.05





**Louis Lot**  
**# 5568 Year 1894**  
Embouchure 10x12mm

