

## General info on the flute

The flute pages on my website are intended to be an introduction into the world of the type of flute that is used in “Irish Trad” and therefore was named “Irish flute”.

Mostly these flutes are made from wood but synthetic and metal (practise) flutes are also made. Even ivory was used in the 18th and 19th century.

All wooden models (except bamboo-flutes) have a reverse conical body bore and a cylindrical head joint. The embouchure-holes vary in shape.

The synthetic, metal and bamboo flutes have a cylindrical body and head.

The most used type in Irish traditional music is the wooden D-flute that has 6 open tone holes producing a D-major scale when opened one by one.

If you do this and start with the “bottom D” with 6 tone holes closed you will play: D - E - F# - G - A - B - C# - D+ = 1 octave, just like the low D-whistle.

The open tone holes also make it possible to play “the Irish way”: fluently and with the use of whistle and piping techniques.

Most Irish fluteplayers (and pipers) learned to play the whistle first and I advice you to to the same: start to learn to play some of the basic whistle-techniques and tunes before you make the step to the flute.

D-flutes are made with or without keys, and if you play a keyed flute, your fingers can operate these keys to play other tones than the above mentioned six tones.

An eight key D-flute has keys to play: C-C#-Eb-F2x-G#-Bb-C (see bottom page 2)

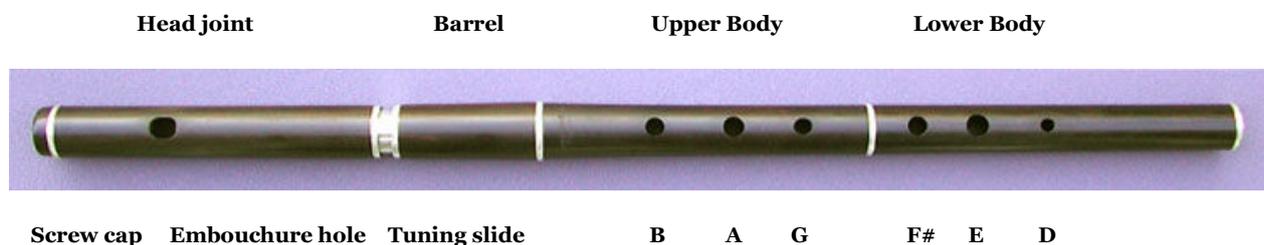
The keyed flute is also named “concert flute”, “simple system flute”, “keyed flute”, “multy-keyed flute”, “the old flute”. Most of them have 4, 6 or 8 keys.

Many fluteplayers prefer to play “Irish Trad” without any keys and use special fingering-techniques: “half-holing” and “forked fingering”.

These techniques are a part of the whistle and piping-basics and they are discussed and demonstrated in my audio-visual Whistle Basics method.

Before I will learn you more about the keyed concert flute that was developed since the beginning of 19th century, I will show you a keyless flute.

This D-flute is made by the Australian flute-maker Terry McGee. It is made of African blackwood and has 4 parts.



A quality flute will have a mechanism for removing and/or resetting the cork stopper that is inside the head at the left side of the embouchure hole. This makes it easier to keep a well tuned flute.



Cap with metal screw mechanism by Terry McGee

## The keyed flute

This type of flute was developed in the beginning of the 19th century and became the successor of the Baroque flute which succeeded the Renaissance flute.

It is known as “concert flute”, “simple system flute”, “keyed flute”, “multi-keyed flute”, “the old flute”, “wooden flute” and because these flutes got a second life in Irish traditional music, they also are named “Irish flute”.



A six key concert flute made in 1815 by W.H.Potter / London



A one key Baroque flute



A keyless Renaissance flute

The Renaissance flute was keyless and forked fingering was used to play accidentals/semitones, which didn't always benefit the purity of tone, but, rather, gave more coloratura (chromaticism) compared to the later developed keyed flutes.

The Baroque flute was an improvement on the Renaissance flutes in tone and volume because of the different conical boring of the inside and the tone holes.

It was fitted with an almost round embouchure hole and sometimes had 1 key.

Until 1750 forked fingering had to be used but from 1750 onwards, several keys were added: in particular D#, F, G#, Bb.

Baroque flutes had smaller tone holes than the concert flutes, and therefore the sound was more refined and intimate.

The concert flute was developed from the beginning of the 19th century.

Especially London flutemakers continued to experiment and develop the keyed flute and were also trying to make their flutes sound more powerful.

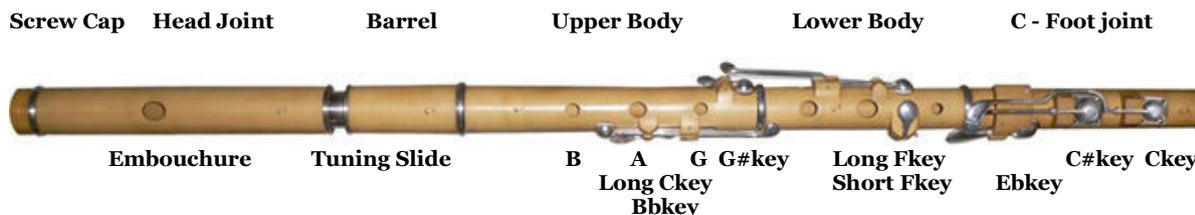
This was done by making larger tone holes but it made it more difficult to use forked fingering. In Germany, France and Italy many types of concert flutes were created also, and most of them consisted of 4 or 5 parts.

All concert flutes were made with a cylindrical head-joint and a reverse conical body bore and most of them had so-called “undercut” embouchure-, and tone-holes.

This means that these holes were made larger on the inside than on the outside and this gave several accoustical benefits.

A standard concert D-flute has six open finger covered tone holes that produce a D-major scale, like the keyless D-flute, and, according to the need of the owner, has 4, 6 or 8 keys to play semi-tones/accidentals.

Here is a replica of a 19th century 8 key “Rudall-model” made by Thomas Aebi.



## The Boehm flute and the decline of the concert flute

Since 1820 the demand for flutes with larger tone holes was growing because of the need for a more powerful and reedier sound.

Eight keys and a C-foot joint became standard too and of course these expensive instruments were mainly played by classical musicians.

One of the famous and influential flutists of that time was Charles Nicholson. This versatile and talented British musician was particularly known for the volume that he could get out of his flutes that were designed by him and his father. Like the concert flutes of many other flute makers and flute companies, his flutes had large tone holes and special adaptations for operating the keys, and he had his own ideas even on blowing and handling a flute.

In 1831 Theobald Boehm, a German flutist/flute maker, was inspired to develop a total new flute concept after attending a concert by Nicholson in London. During his London trip he also visited some local flute makers and with these experiences he went home to make the flute that would become the standard, even today, and would cause the decline of the concert flute in classical music.

Boehm's concept was based on a more scientific approach: he wanted to create a flute with even bigger holes, a conical shaped head and a cylindrical body. The large tone holes were placed in a mathematical way and the key system was revolutionary too and extremely functional. The result was a flute with a powerful and pure sound that also was better adapted to function within the Western musical system with its "equal tempered" tuning system.

The concert flute gradually fell from grace with the classical flutists who, from 1847 onwards, increasingly began to give preference to the cylindrical Boehm flute. Boehm flutes were produced in large numbers and became a massive success. Contrarily the conical concert flutes were widely discarded but soon received a second chance and began a new life in the Western folk music, and in particular the "Celtic" music scene.

This was also the case in Ireland and the so called "Celtic Revival" in the last century has given an extra boost to the popularity of Irish traditional (flute) music, which in its turn, has resulted in a widespread demand for old and new concert flutes. Nowadays there are many craftsmen making replicas of keyed concert flutes and keyless flutes, and some of them succeeded in creating special innovations for the use in Celtic/Irish music.

Therefore it is wise to orientate yourself well before buying a flute.

I hope this introduction was a bit of a help and on the "Links"-page of my website: <http://www.whistle-flute.com/?Links> = many flute-related links to find info about:

History of the concert flute/The tuning and pitch of old and new flutes/Fingering charts/Flute maintenance and repair/ Names and websites of expert flute makers/ Names and websites of expert flutists/Flute tutorials, workshops, summerschools.



Two Boehm flutes of the 19th Century: a silver plated and an ebony flute

[www.whistle-flute.com](http://www.whistle-flute.com)