The Classical and Romantic periods saw the addition of more keywork and, especially in England, larger embouchure and tone holes. While larger tone holes and other design factors made the use of cross-fingering less practical, the additional keys provided another, easier means to play chromatic music. These flutes were louder and had now acquired yet another voice due to their increased production of harmonics. Many post-baroque flutes also included a tuning slide that helped flutists play at a wider variety of pitch levels. The older renaissance and baroque flutes tended to be pitched anywhere from A=392 to A=430, well below A=440, the standard for most Irish session playing today.



Figure 3-5. An eight-key classical flute in cocuswood and silver by Rudall and Rose, serial # 4973. Made in London, 1844.

THE SIMPLE-SYSTEM

All of these pre-modern style flutes (apparently even the Neanderthal flute) are called *simple-system* flutes, referring to their common fingering system. In this book, I use the term simple-system flutes the way it is now mainly used in Irish music circles: for post-baroque and pre-Boehm flutes.

Simple-system flutes have six primary tone holes that are covered and uncovered solely by the fingers, that is with no mechanical keywork intervening between the fingers and their holes. Covering all these holes yields a low D. Uncovering them one by one from low to high results in a scale in the key of D major (see the fingering charts in Appendix C).

The basic fingering system of the simple-system flute is identical to that of the tin whistle and is almost the same as that of the uilleann pipes. This is no doubt a factor that helped make the simple-system flute a natural choice for traditional Irish musicians. Techniques of piping and tin whistle playing were easily adapted to the simple-system flute. To this day, there is a great deal of overlap among players of these three instruments.

Many simple-system flutes have various combinations of supplementary keys that operate on additional holes, keys that make chromatic music more practical and which sometimes extend the range of the instrument. But still, the primary six finger holes of the instrument are touched only by the fingers.

NEW IRISH FLUTES

With the growth in popularity of the flute in traditional Irish music, and of Irish music in general, flute makers in Ireland and other countries since the 1970s have been making flutes designed specifically to fulfill the musical and aesthetic requirements of Irish traditional music. These then are *Irish flutes* in a truer sense. They are typically made with from zero to eight keys and range from relatively low priced beginners' instruments to expensive and exquisite models comparable to the work of the best of the 19th-century makers.