quarter tone or less, and finds falling slides to be somewhat more natural to play than rising ones.

When sliding up through a whole step, it can be effective to gently depress the key that would produce the intervening half-step note while gradually removing the finger from the open hole of the lower note. For example, in sliding from D to E (the interval of a whole step), while slowly removing B3 from its open hole, you can simultaneous and slowly depress the D-sharp key. With some practice you will be able to play a very smooth and nearly continuous slide from D to E. Working with the airspeed and embouchure at the same time, if there is enough time, can enhance the effect of such a slide.

If your open-hole flute is well padded, habitually sliding the fingers off the holes and onto the rims of the keys should not necessitate any periodic adjustment of your keywork, according to Chris Abell.

In fast music there is often just not enough time to perform the delicate finger or embouchure maneuvers that I have been describing. In such cases, one can effectively suggest the slides of the simple-system instruments by quickly easing into the principal note from the note a half step below, for a rising slide, or from above for a falling slide. For instance, when moving from G to A in a fast tune you can use the G-sharp key to suggest a slide into the A.

This technique was used a great deal and to fine effect by Paddy Carty, the great traditional player from Co. Galway who used a closed-hole Radcliff-system flute (see the section entitled *Modern Flutes Enter the Irish Tradition* on pp. 53-54 of Chapter 3, and the transcription of Paddy Carty's recording of *The Jug of Punch* on pp. 384-385 in Section 8). Noel Rice has recounted to me conversations with Paddy Carty in which Carty had expressed a wish that he could have had an open-hole flute.

On the simple-system flute and tin whistle, I often employ very subtle slides that begin on a pitch that is in between the half steps. I do this by "shading" the tone hole, just covering or affecting a portion of the hole with a somewhat straightened finger. This is quite easily done even in fast tunes and it contributes a great deal to a feeling of fluidity in the music. This is a very important element of my playing style, which I believe is impossible on a Boehm-system flute.

Advantages of the Closed-Hole Flute

As I stated above, Chris Abell prefers to use a closed-hole flute for playing Irish music. His personal style of playing does not involve finger slides, so the closed-hole flute's disadvantages in that area are not an issue for him. He feels that the larger playing surfaces of the closed-hole flute's keys offer him a more comfortable way to finger the flute. Also, for reasons of ease and comfort, he prefers an offset G. In addition, Chris points out that the timbre of the notes throughout the closed-hole flute's range are more consistent, since all of its keys are closed. The open-hole flute has only five holes that are actually open, the majority being closed.

Very Small Hands

Children, and adults who have very small hands, may well find the closed-hole flute better suited to them than the open-hole flute.

Boehm-system flute players, being accustomed to relatively close finger spacing, sometimes complain of the added stretch when they try playing a simple-system flute. For most people, the finger spacing of the simple-system flute becomes quite comfortable after an initial period of adjustment, as long as they learn to hold the instrument properly.

FINGER VIBRATO

Partial-hole finger vibrato is not possible on the Boehm-system flute, but total-hole finger vibrato is. See Chapter 18 for explanations of these terms.

Joanie Madden does not use finger vibrato at all on the Boehm flute, feeling that it sounds too heavy and unnatural on the instrument. She uses breath vibrato instead. She does, however, use finger vibrato on the whistle.