There are three main factors in bowing which affect the way the string vibrates – the speed of the bow, the pressure, and the bow’s distance from the bridge (soundpoint). The first pressure and soundpoint exercises have already been described in BASICS (Soundpoints: July 1991; Casals pressure exercise: September 1991). This month is devoted to bow speed.

Every shade of tone colour is available through the different degrees of speed, pressure and distance from the bridge. Proportions of less speed to more pressure are used for less open, darker or denser tone colours. But for the most open, freely-speaking, resonant sound, tone production is based on speed of bow, not pressure.

**Exercise**

The exercise consists of strokes that begin quickly and end slowly, with no gap between the fast and the slow parts of the stroke. The aim is to make the string vibrate widely, and the instrument to resonate well, during the fast part of the stroke using as much speed of bow, and as little pressure, as possible. One fast-slow stroke is played in a whole bow, then one in each half of the bow, one in each third, and so on.

Play the note D, 3rd finger on the A string (see Example 1a). Then divide the bow into two halves, playing one fast-slow in the lower half, and one in the upper (Ex. 1b). Then three divisions in each bow (Ex. 1c), 4, 6, 8, 9, 12, 16, 20, 24, 28 and 32. (From 12 onwards, play and count in groups of four – 3 x 4, 4 x4, 5 x 4, etc.).

Ex. 1  
\[
\begin{array}{cc}
F = & \text{FAST} \\
S = & \text{SLOW} \\
\end{array}
\]

Ex. 2

Example 2 is exactly the same as Example 1, written out conventionally. Written like that however, the accents would normally be played using a combination of speed and pressure. In the exercise, as much speed and as little pressure as possible is used as shown in Example 1.

**Sound**

Playing each division many times, down-bow and up, the exercise sounds like a series of throbs within one unbroken, continuous note. Watch the string vibrating at its middle point between nut and bridge. Using bow speed not pressure, make the string vibrate as widely as possible during the fast part of each fast-slow.

**Bow Division**

More bow is given to the beginning of each fast-slow stroke (fast bow), than the end (slow). But divide the bow evenly into halves, thirds, quarters, sixths, etc.

**Bow Pressure**

Slightly more pressure is needed for the fast part of each fast-slow stroke than the slower part. But still aim to use speed rather than pressure to make the instrument ring.

**Distance from the bridge**

Keep the bow abut a centimetre from the bridge throughout, (and the equivalent on the larger instruments). Having learned the exercise there, also play it midway between the fingerboard and the bridge, and at the fingerboard.

**One action or two?**

Do not try to play the two speeds separately – ie, a fast and then slow bow. Each fast-slow is one stroke, one action, not two.

December BASICS will feature the first vibrato exercise of the series.