
BASICS

Pivoting

Pivoting is one of four ways that the bow can move in relation to the string:

- 1 Vertical (tapping the string without making a sound)
- 2 Horizontal (moving along the string as a down- or up-bow)
- 3 Around (pivoting)
- 4 Forwards and backwards (moving towards or away from the bridge)

The interesting thing about these four possibilities is that none of them are used on their own, but always in combination with at least one other of the four.

The vertical movement makes no sound, but combined with the horizontal movement creates lifted or bounced bowings like *spiccato*. Begin with a vertical tapping motion, somewhere a little below the middle of the bow; gradually add length until the note begins to sound:

Example ①

A musical staff in treble clef showing a sequence of bowing techniques. The first measure has five 'x' marks above the staff, labeled 'All height, no length' and 'Silent, vertical tapping'. The second measure shows a series of notes with stems, labeled 'Beginning to add length' and 'Almost pure sound'. The third measure shows notes with stems and a *ppp* dynamic marking, labeled 'More length' and 'Very short, 'crisp' spiccato'. The fourth measure shows notes with stems and a *pp* dynamic marking, labeled 'More length' and 'Beginning to become rounded'. The staff ends with 'etc.'.

There is no such thing as a straight line in any bow stroke. The apparently horizontal movement of the bow contains a hidden curve. Combined with pivoting, the movement around the string, even one, long bow on one string is curved.

Every stroke is different, but a typical curve could be illustrated as follows:

Example ②

A musical staff in treble clef showing a single note with a curved stem. An arrow points to the top of the stem with the label 'Almost touching the E string'. Another arrow points to the bottom of the stem with the label 'Almost touching the A string'.

Combined with the horizontal movement along the string, pivoting makes it possible to travel to a new string level *while* playing the note before the string crossing. The following simple exercise illustrates the movement:

Play whole bows, pivoting several times during each stroke without touching an adjacent string:

- On the **G string**, pivot to the left until the hair almost touches the rim of the violin; pivot to the right until almost touching the D string.
- On the **E string**, pivot to the right until the hair almost touches the rim of the violin; pivot to the left until almost touching the A string.
- On the **A and D strings**, pivot between the adjacent strings as far as possible without touching them.

BASICS

Example 4

mf Pivot near to D string Pivot near to rim Pivot near to D string Pivot near to rim

mf Pivot near to A string Pivot near to rim Pivot near to A string Pivot near to rim

- Pivot *while* the bow is moving along the string. Pivot two, four and eight times in each stroke, making it sound like normal playing on one string without pivoting. The example above shows four pivots on each string.
- In the upper half, moving the hand from the wrist reduces the amount of arm movement needed.

Smooth string crossings

String crossings are smooth, articulated or accented. The sooner the bow begins to move towards the next string, the easier it is to make the crossing smooth.

- Use double-stops to force the string crossing to be too early. Gradually shorten the double-stop until finally reaching a normal and very smooth string crossing:

Example 5

Move towards the G string during the E

Move towards the D string

Move towards the G string

Move towards the D string

Move towards the G string

Move towards the D string during the C

Traditional pivoting exercise

Example 6

- Play the pattern using little bow at the heel, middle, and point; using more bow in the lower half, middle, and upper half; and finally using the whole length of the bow.
- Repeat on the other pairs of strings.

The forwards and backwards movement produces no sound, but combined with the horizontal allows the bow to steer towards or away from the bridge:

Example 3

Nearer the bridge

Nearer the fingerboard

Nearer the fingerboard

Nearer the bridge

f p p f