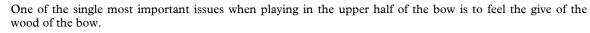
# **BASICS**

# Playing in the upper half

### The give of the wood and the hair



Because they are the thinnest, violin bows are the best in terms of bendiness and springiness. Viola bows are not too bad, but cello bows are starting to feel stiff and bass bows are rock-solid. Violinists should remember to enjoy all the sensations of give in the stick that others are without.

At the heel, the hair gives and the wood of the bow is rigid; at the point, the wood gives (in the middle of the bow) and the hair is rigid; in the middle of the bow, both the wood and the hair give. Try it for yourself and see: with the bow sitting stationary on the string about seven centimetres from the extreme nut, press the bow down hard into the string. Notice how the hair bends at the point of contact (Fig. 1) but you cannot change the shape of the wood of the bow.

Do the same about seven centimetres from the point (Fig. 2). However hard you press, you cannot change the shape of the hair, which feels rigid, and the give occurs in the middle of the bow (Fig. 3).

Therefore the feeling of the bow's contact with the string changes, during the journey from the heel to the point, centimetre by centimetre; and each bow stroke feels slightly different, and works differently, depending on where in the bow it is played.



Figure 2 The hair is rigid in the upper half

### Play down into the springiness of the stick

One of the first things elementary students need to discover about bowing is to play down into the springiness of the stick rather than only move the hair horizontally along the string.

But this feature of bowing is usually either neglected or left out entirely, firstly because of all the other problems already in the way – of holding the bow and of drawing it parallel to the bridge – and secondly because the last thing you would ever encourage somebody to do is actively to press with the bow. The teacher is more likely to be spending all their time trying to *stop* the pupil pressing.

However, years later, the same student may now be doing all kinds of good things in holding the bow, bowing parallel to the bridge, and moving the bow horizontally with a pure tone – and yet still never really be enjoying playing deeply into the tensions in the stick. But playing into the wood of the bow is a simple thing to add to the bow arm, and the results are always exciting as new dimensions open up.

To get a practical feel for the springiness of the stick, try the following experiment: resting the point of the bow on the D string, so that the bow is approximately horizontal, make your left fingers into a 'hook', and 'hang' the left arm from the bow (Fig. 4).

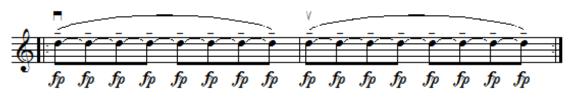
Gently push down into the bow (in the middle) and release again, like testing the springiness of a trampoline. Feel the springiness of the wood of the bow.

Then repeat, but now using the bow hand to do it instead of the left hand (Fig. 5). Push the wood down towards the string (in the middle of the bow) in exactly the same way as before, feeling the same springiness in the stick.

One of the very best exercises for tone is the pressure exercise, taught in the eighteenth century by Leopold Mozart (and therefore played by Wolfgang Amadeus), and in the twentieth century by the great cellist Pablo Casals, and many other leading teachers and players. You just sink into the bow in a heavy-light-heavy-light pattern up and down the whole length of the stick. You can do sequences of different numbers of heavy-light patterns, but as a quick warm-up, and for the present purposes of feeling the different qualities of the stick in different parts of the bow, eight on each bow is sufficient:



Figure 4 'Hang' the left arm from the bow



This simple exercise sensitizes you to all the different gives of the hair and the wood in each part of the bow. At the same time it helps you to equalise the sound in the lower and the upper half.

# **BASICS**

### The difference between the lower and upper half

The need to equalise the sound in the lower and upper halves of the bow stems partly from the fact that the physical bow is heavier in the lower half and lighter in the upper half, causing the point-of-balance to be below the centre of the bow,. Also, the hand is more directly above the strings in the lower half (Fig. 6), so below the point-of-balance it feels as though you can rest the weight of the whole arm into the string. Higher in the bow this does not seem possible (Fig. 7), though it is possible to have a *perception* of 'relaxing the arm into the bow' in the upper half.



#### **Experimenting with leverage**

Hold a pencil the same way that you hold a bow: there is a feeling of great control because the end of the pencil is so near to the fingers. It is all a question of leverage. You can get a similar feeling of extra control if you hold the bow in the middle.

Begin with your hand in the middle of the bow (Fig. 8). Experiment with all kinds of different bow strokes and effects, and then hold the bow a little lower down and repeat..

Gradually work your way down the bow until holding it normally at the frog. Everything always feels much more precise and more in control when you arrive back at a normal bow-hold, compared to before you did the exercise. This is also an interesting way to practise individual phrases or passages.



#### Right thumb over-pressing

Again pushing the hair of the bow deeply down into the string at the extreme heel, notice how completely relaxed and almost uninvolved your thumb feels on the bow. There is clearly absolutely no need for it to push up into the bow or counter-press in any way.

Repeat at the point and notice how the thumb now has to counter-press. Again, this is just the laws of leverage at work. There is nothing particularly wrong if, after playing powerfully at the point of the bow, you notice 'dents' in your right thumb (which of course disappear after a few seconds).

But the danger to avoid is that having begun at the heel with a relaxed thumb, and then travelled to the point where the thumb has now become active, the thumb continues to be active all the way back down to the heel. Naturally this is a great cause of tension, but it is simple to avoid. You don't have to think about the thumb in the upper half because you must never deliberately 'press' with the thumb there – that would be a very undesirable thing to do, and anyway it just happens naturally on its own – so that just leaves the lower half. And playing in the lower half, just make sure you never press upwards there with the thumb either. Just don't press.



Figure 6 The hand is above the strings

Figure 7 The hand is far from the strings

Figure 8 Work down to the heel from here