Springing bowings

The most important thing to remember in any springing bowing is that the bow *wants* to bounce. It does not sit in the string as a dead weight, as it would if it were an iron rod. The springiness of the wood, the hair, and the string all combine to give the bow its own life the moment any impulse or energy is directed into it.

• See how the bow naturally wants to bounce by holding the bow with only the thumb and the second finger and playing a few continuous down- and up-bow *spiccato* strokes.

As soon as the hair has touched the string for the first note, take the first, third and fourth fingers off the bow so that you continue with only the thumb and second finger (Ex. 1). Move the bow up and down without trying to make it bounce. Let it bounce by itself:



Experiment to find the exact part of the bow where you can do this – it may not work if you do it too high
in the bow or too low.

Since all that the bow wants is to bounce out of the string, lifted strokes are easier than on-the-string *legato* because you do not have to *do* anything. If you let them, they play by themselves. What you have to do is *allow* the bow to bounce.

Party trick

This is a great way to demonstrate the magical qualities of the bow, and often a favourite of orchestral players in idle moments of waiting for something to happen during a rehearsal (but a sure-fire way to annoy their colleagues).

Drop the bow on to the string somewhere above the middle of the bow, and simply pull it and let it bounce. If you get the speed of bow just right, the bow merrily bounces along the string in a machine-like, extremely rapid staccato. It could be notated like this:



The trick is to do nothing at all after the initial impact except to move the bow – very, very slowly. Again, after dropping the bow on to the string, take all your fingers off the bow except the thumb and second finger (Fig. 1) and just pull.

Proportions

The subject of proportions is the key to understanding all technical (and musical) matters on a string instrument. Everything that happens in playing the violin is describable, and the language of the description is always about the amount of one thing in relation to another.

For example, tone production is a question of proportions of speed of bow and pressure in relation to the distance from the bridge. All the different shades of vibrato come from different proportions of speed of movement to width, with both of these affected by how much of the pad of the finger is used (and the exact degree of finger-pressure). Intonation is all about proportionality – for example, a true octave is exactly at the ratio of 2:1.

The key proportions to consider in any bounced strokes are the length of bow in relation to the height of the bounce. The combination of a higher degree of bounce with less bow ('V' shape) produces a shorter, crisper *spiccato*, while a lower bounce with longer strokes ('U' or 'saucer-shaped') produces a more rounded *spiccato*.

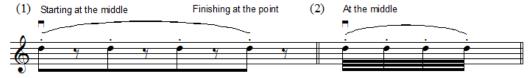
As well as these principal elements of height and length that must 'add up', the fundamental question of the proportions of speed, pressure and distance from the bridge apply in the precise moment that the hair of the bow catches the string to produce the *spiccato* note – just as much as if you are drawing the bow along the string in a sustained *detaché*.



(1) The bow naturally bounces as you move it up and down along the string

Ricochet

While *spiccato* is usually played in the lower half (anywhere from the middle of the bow down to as low as the point-of-balance), ricochet is a stroke played in the middle to upper half of the bow. Like *spiccato* it provides graphic illustrations of the need to keep the proportions correct. One of the principles is that the less bow you use, the lower the bounce and the faster the ricochet; the more bow, the higher the bounce and the slower:



Very high bounce, much distance travelled between bounces

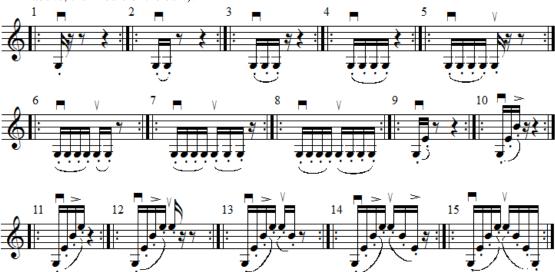
Little bow, near the string and fast

- (1) Four bounced notes together, spread over the entire upper half of the bow, is an exaggerated ricochet that is not normally required, but it is still perfectly correct in its proportions and you can do it with a good sound on each note. Control the bounce with bow-speed.
- (2) This is the other extreme, where the bow barely leaves the string, only a few centimetres of bow are used, and the notes comes out very quickly. Again, all the control comes from the speed of bow.

Between these two extremes lie every possibility of ricochet, from the more graceful and charming to the more energetic and brilliant.

Ricochet exercise

- First play this exercise without the first finger on the bow (Ex. 2), feeling how the bow bounces naturally even if the second finger and thumb squeeze the bow to try to prevent it from bouncing. Then ensure that the first finger, when it is on the bow, does not reduce this natural bounce.
- Use full hair, the wood of the bow directly above the hair.
- Try different areas of the bow to find the place where it bounces the most (somewhere around, or just above, the middle of the bow):



- Bar 1 Drop the bow on to the string in a curved motion, letting it bounce back out naturally.
- Bars 2-4 After dropping the bow on to the string, pull it smoothly so that the next notes 'play themselves'. Control the rhythmic evenness of the notes with exact control of the bow-speed.
- Bars 5-7 Change direction from down to up smoothly, so that the notes are played with machine-like regularity. Watch, or keep in mind, the line drawn in the air by the extreme point of the bow. There is a way of catching the up-bow where all the proportions of the curves remain mathematically pure.
- Bar 8 Repeat continuously, using a slight 'kick' on the first down-bow to keep the momentum going.
- Bar 9-15 Move the elbow very smoothly and evenly across the different string levels. Notice how each string has its own particular part of the hair that engages it (i.e. the hair that plays the D string is a little lower in the bow than the hair that plays the G string).

Slightly accent the marked notes to avoid any feeling of playing the first three notes as a triplet.



See how easily and naturally the bow bounces