

Vibrato



Whether you have an arm vibrato or a hand vibrato, it is helpful to practise both types since each contains elements of the other.

Occasionally play vibrato exercises with the scroll resting against a wall.

Flexibility

First joint 1^{re} FALANGE *curva* *recto*

Play without the bow.

The first joint of the finger, the joint nearest the nail, acts like a brake on the vibrato. The more the joint is allowed to give, the wider and slower the vibrato becomes. It is important not to play with the 'brake' set in one position all the time – it is always changing according to the vibrato required. The 'brake' should rarely be completely on or completely off.

Bend and straighten each finger at the first joint. Either bend the finger itself, on its own, or use the hand and finger to bend the joint. Note that the angle of the vibrato into the string is diagonal to the string.

- Place a finger on the string in its normal, curved shape (Fig. 49a). Straighten the finger from the middle joint to the tip (Fig. 49b); bend again, straighten again, etc. Make the movement quickly and loosely.
- Begin with the finger resting lightly on the surface of the string. While bending and straightening, gradually press harder until pressing the finger to its maximum; then gradually release again to the surface of the string.
- Repeat in a continuous motion. Feel how relaxed the finger and hand is when resting lightly on the string, and keep that relaxation while pressing the string.

ber

Bend – straighten – bend, etc.

Fingertip lightly on the string – heavier – heavier, etc. – lighter – lighter, etc.

posada - ligero

Repeat with each finger, in various positions, on each string.

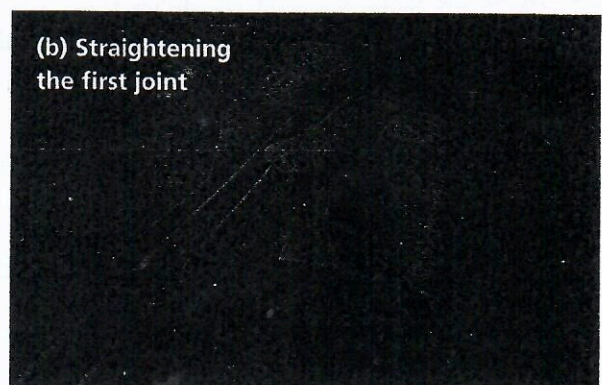
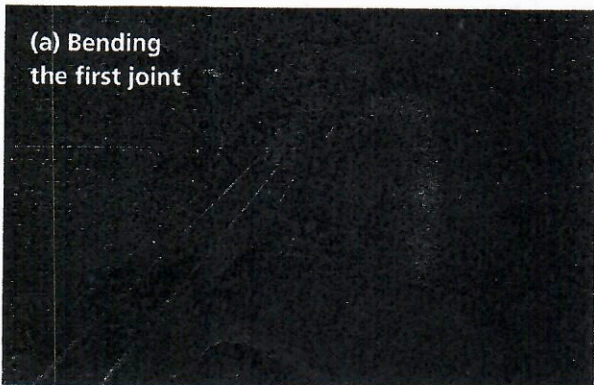


Fig. 49

Base joint

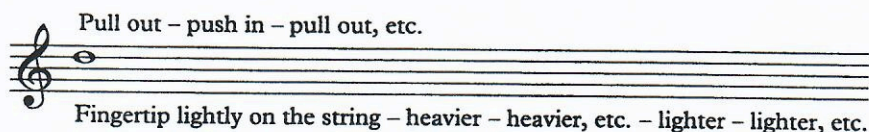
LOS NUDILLOS

Play without the bow.

Like the first joint, the base joint also acts as a brake on the vibrato if it is prevented from moving. The actual amount it moves may be so little as to be invisible, but if it is not able to move at all the whole hand may become tight.

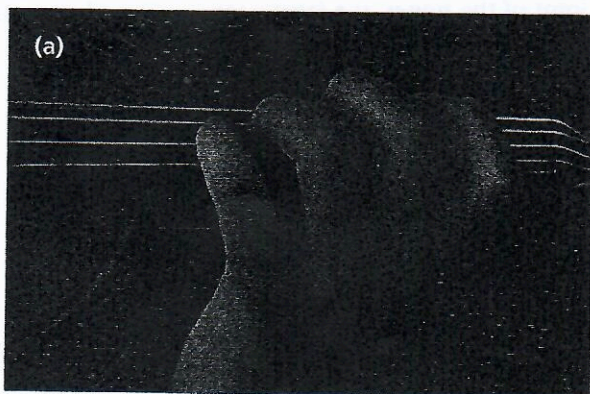
Press and release the string, as in the exercise above, but this time move the base joint in and out as well as the first joint.

- Begin with the fingertip resting lightly on the surface of the string (Fig. 50a).
- Move the finger at the base joint by pulling and pushing the knuckles out and in. *empujados* *señalados*
- The finger straightens slightly as you pull the knuckle away from the neck of the violin (Fig. 50b). The finger curves again as you push the knuckle back in (Fig. 50a).
- While moving the knuckles out and in, gradually press the finger harder and harder into the string, until pressing to the maximum. Then gradually release again to the surface of the string, still moving the knuckles in and out.

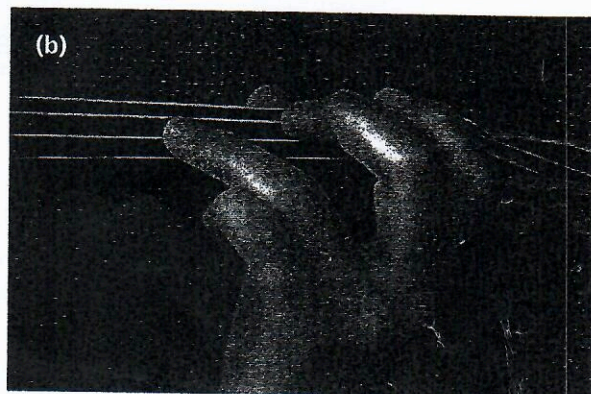


Repeat with each finger, in various positions, on each string.

Fig. 50



Pushing the base joint in



Pulling the base joint out

Circles

Play with or without the bow.

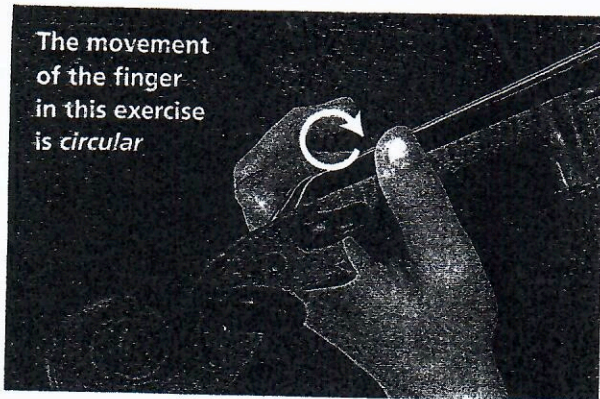
Movements in violin playing are never in straight lines. Every movement is circular, or moving in an arc. In vibrato, the hand does not move backwards and forwards in a straight line. This is partly because the finger releases the string slightly on the backward movement of the vibrato, making the fingertip move in a circular manner. This exercise exaggerates the circular movement.

- Rest the scroll against the wall. Use one finger on the string at a time.
- Move the hand in clockwise circles (Fig. 51). Think of the movement as forward-and-down on the dotted eighth-note (quaver), back-and-up on the sixteenth-note (semiquaver).
- **Forward movement (dotted eighth-note):** The fingertip goes deeper into the string; the finger curves more.
- **Backward movement (x-note):** The fingertip releases the string; the finger straightens slightly.



Make this circular movement with each finger, in various positions, on each string.

Fig. 51



Hand and arm movements

Sliding exercises

Play with or without the bow.

Keep the fingers relaxed, without squeezing together, and touch the neck with the thumb as lightly as possible.

Exercise 1

Play each bar as fast as possible. The idea is to begin with a large sliding movement up and down the string, and gradually to make it smaller and smaller until it becomes the width of a vibrato. The actual notes need not be exact: you can make the sliding movement smaller by quarter-tones.

- **Bars 1-3** Begin with a large sliding movement (using the arm or hand), and reduce the distance gradually. Move the thumb as well as the hand until the movement is very small; then keep the thumb in one place while only the finger slides on the string.
- **Bar 4** When the sliding is only a quarter-tone or so, gradually fix the finger on the string so that the fingertip rocks to and fro without sliding. The backward movement is written as an x-note.
- **Bar 5** Using the same hand or arm movement as in bars 1-4, play a very narrow vibrato, the finger rocking without sliding.

The musical notation for Exercise 1 consists of four staves, each representing a different finger (1, 2, 3, 4). Each staff contains four bars. The first three bars of each staff show a sliding motion with the specified fingerings. The fourth bar of each staff shows a vibrato effect, indicated by an 'x' note. The word 'simile' is written above the second bar of the first staff.

Hand vibrato

- Move the finger up and down along the string, moving the hand from the wrist, and leading the movement from the finger.

Arm vibrato

- Move the arm and hand together. Although the main movement is from the elbow, still lead the movement from the fingertip, and still allow the hand to give at the wrist.

Play on each string.

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Exercise 2

Alternate between a semitone shift, in which the fingertip slides on the string, and a vibrato movement.

- **First bar:** Shift lightly. Keep the thumb in one place as the finger slides.
- **Second bar:** Vibrate (without sliding the finger on the string) using the same arm or hand movement as in the first bar. The x-notes represent the backward movement of the vibrato, which should not be heard. Keep the joint nearest the nail *loose*.

**Hand vibrato**

Move the hand up and down the string from the wrist, without actively moving the arm. Lead the movement with the finger.

Arm vibrato

Move the arm and hand together. Although the main movement is from the elbow, keep the wrist very relaxed. Lead the movement with the finger.

Play on each string.

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Tapping

Play this exercise without the bow.

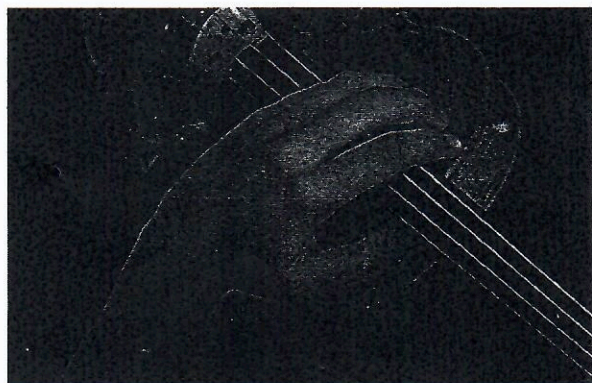
Place the base of the thumb along the top rim of the violin (Fig. 52). Place the pad of the thumb in its usual place for high positions, at the top of the violin neck. Do not move the fingers themselves – move the hand up and down from the wrist.

- 1 Tap the fingers (all four at once) on the violin table to the left of the fingerboard. Tap rapidly in fours, leaving the finger down on the fifth tap, i.e.:
 tap, tap, tap, tap, tap-and-stop
 tap, tap, tap, tap, tap-and-stop, etc.
- 2 Do the same on the strings near the top of the fingerboard.
- 3 Tap with one finger at a time, on each string, near the top of the fingerboard.

Arm vibrato

Keep the pad of the thumb at the top of the violin neck, but keep the base of the thumb away from the top rim. Tap the fingers by moving the forearm, not the hand.

Fig. 52



Place the thumb along the top rim of the violin

Wall exercise

Stand with your left forearm flat against a wall.

- Rapidly move the hand backwards and forwards, from the wrist, without the forearm coming away from the wall. Steady the forearm with your right hand (Fig. 53a).
- Make the same movement, but moving the whole forearm from the elbow, the hand and forearm moving in one piece (Fig. 53b).

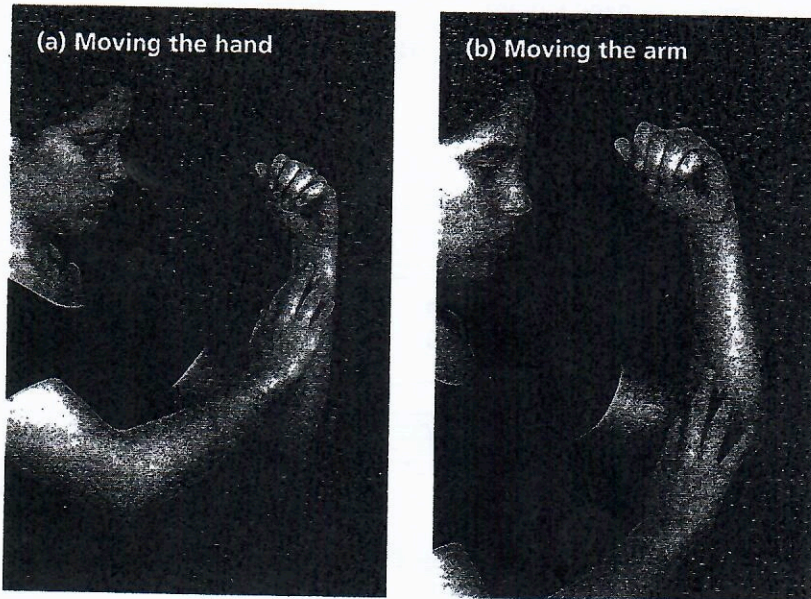


Fig. 53

Forearm rotation

The chief movement of the forearm is backwards and forwards, but there is also an *almost-invisible* sideways turning movement.

Exercise 1

Without the violin, hold the left hand in playing position, level with the shoulder.

- 1 Turn the forearm anticlockwise so that the palm faces away from you. Then turn clockwise back again to violin position.
- 2 Make this movement continuously, back and forth, as quickly as possible – the hand should become a blur. Keep everything loose – the wrist, hand and fingers, and the upper arm and shoulder.
- 3 While making this turning movement, very slowly move the elbow to the left and up (until the palm faces the floor and the arm is horizontal).
- 4 Continuing to make the turning movement, move the elbow back down and to the right, until the arm is in playing position for the G string (elbow turned to the right).
- 5 Do not stop the turning movement, while continuously moving the arm from playing position to palm-facing-down position, and back again.

Exercise 2

Without the bow, tap the fingers up and down on the string quite quickly, one at a time. For the purposes of the exercise, do not move the finger much – tap by rotating the hand sideways.

- As you put each finger down, turn the forearm clockwise. As you raise each finger, turn the forearm anticlockwise away from the fingerboard.
- Keep the thumb relaxed, and feel it turning on the violin neck.



Repeat on each string.

Exercise 3 – Thumb

Partly as a result of forearm rotation, the thumb moves in the opposite direction to the finger. This is never an active, conscious movement, but when the finger vibrates forwards the thumb moves backwards, and vice versa. This movement is a slight *rolling* on the neck of the violin: a fraction more of the left side of the thumb (the side furthest from the player) touches the neck when the finger vibrates forwards (towards the bridge), and a fraction more of the pad touches the neck when the finger vibrates backwards.

The movement is so slight as to be almost invisible, but if it is blocked the vibrato may become tense. It is just as much a part of arm vibrato as of hand vibrato.¹

The x-notes represent the backward movement of the vibrato, which should not be heard.

¹ This thumb movement is not always a part of arm vibrato. The thumb does not move in the opposite direction to the finger if the arm and hand move together as one unbroken unit (when there is always a straight line from the elbow to the knuckles).

Although at times this vibrato works well, it may be too wide and slow as well as too tense. The thumb does move in contrary motion to the finger when the arm movement 'swings' the hand backwards and forwards as a passive movement (see Exercise 286). This gives a feeling of the vibrato 'motor' being shared between the finger, hand and arm, rather than being only somewhere just above the elbow. Whatever vibrato you use, it is good to practise every type of exercise.

F = forward
B = back
♩ = 60

FINGER: F B F B F B F B vibrate normally
THUMB: B F B F B F B F

simile vibrate normally

- Using a normal hand or arm vibrato movement, roll the finger forwards four times, in a firmly dotted rhythm. At the same time, roll the thumb in the opposite direction.
- On the next forward movement (the fifth), make a normal arm or hand vibrato, i.e.:
forward, forward, forward, forward, forward-and-vibrate
forward, forward, forward, forward, forward-and-vibrate, etc.
- During the notes with normal vibrato, feel how the vibrato seems to be powered from the fingers as much as from the hand or arm.

Repeat with each finger on each string.

Relaxation exercises

Releasing to a harmonic

During the forward movement of the vibrato, the finger leans slightly more heavily into the string. The finger releases the string slightly during the backward movement. The pressure differences are an automatic result of leaning the finger forward – never press the finger deliberately.²

A vibrato with equal finger pressure backwards and forwards is a major cause of left hand tension.

♩ = 100

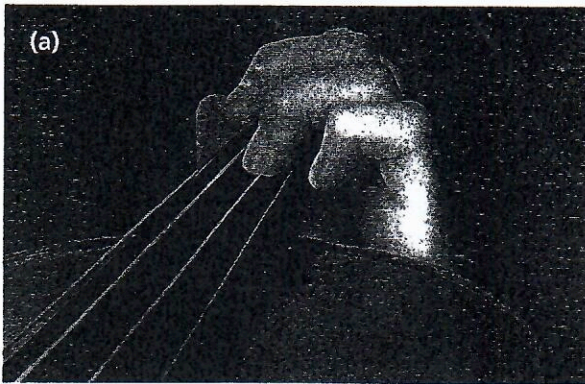
² See *Rolling fingers into the string*, Exercise 130.

³ Normally, the forward pitch of vibrato is the in-tune pitch of the note. Here, the backward pitch is an in-tune note, because of needing to use the harmonic to lighten the finger. A 'flat F' is used because rolling from an in-tune F to an E harmonic would be too big a movement.

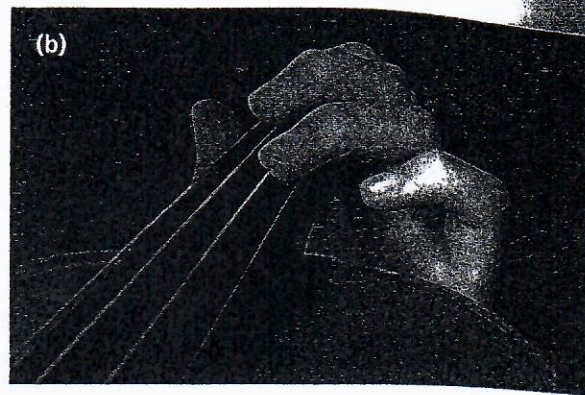
- 1 Start on a very flat F, just above E^h on the A string.³ Position the finger on the string closer to the *tip* of the finger than to the *pad*, i.e., quite upright (Fig. 54a).
- 2 Using a normal hand or arm vibrato movement, roll the finger back towards the pad. At the same time *completely release the string* to play the harmonic E. More of the pad now touches the string, with the finger flatter (Fig. 54b). Do not slide the finger along the string as though shifting.
- 3 Roll forward towards the fingertip. At the same time the finger bends slightly at the nail joint and goes deeper into the string. The flat F is played automatically, without the finger having to 'press'.

The harmonic should sound clearly. Play *f*, with an even sound.

Repeat with each finger, and on the other strings using the equivalent harmonics.



The finger in its forward, 'into-the-note' position



The finger rolled back, releasing the string

'Swinging' the hand in arm vibrato

The movement of the arm, in arm vibrato, causes a passive movement in the hand. There is no active hand movement, but an *almost-invisible* backwards-and-forwards movement in the opposite direction to the arm.

If the forearm and hand move as one unbroken unit, this tends to produce slow and wide vibratos, and you have to work much harder than necessary. In arm vibrato it is possible to continue vibrating even if someone tries to prevent you by holding the forearm firmly, just below the wrist.

In this exercise, none of the hand movements is an active movement.

Without the violin, hold the left arm in playing position, palm facing you (so that if you were playing, the fourth finger would not be able to reach the E string).

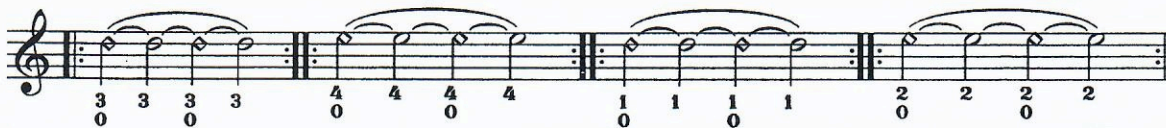
Using a movement from the arm, loosely 'swing' the hand.

- 1 Swing the hand backwards and forwards. If you really allow the hand to go floppy, a small movement in the arm produces a large movement in the hand.
- 2 Swing the hand from side to side, as though waving to yourself.
- 3 Swing the hand in circles, clockwise and anticlockwise. Relax the fingers, hand and wrist, and let a small circular movement in the forearm produce a large circular movement in the hand.

Vibrating harmonics

Alternate between a harmonic and a stopped note. Vibrate all the time without stopping, during both the harmonic and the stopped note.

- Completely relax the hand, fingers and thumb during the harmonic, and *keep that relaxation while playing the stopped note.*
- To change from the harmonic to the stopped note, move the finger down into the string *very slowly*, without stopping the vibrato, and release the string back to the harmonic very slowly.



Repeat on the other strings using the equivalent harmonics.

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Keeping the scroll still

The aim of this exercise is to be able to make a forceful vibrato without the scroll of the violin moving. This is not possible if the hand is tight.

- 1 Play a very slow, very narrow vibrato.
- 2 Look at the scroll. If it moves even the smallest amount, relax the thumb, hand and fingers, or change the direction of the vibrato, until the scroll stays perfectly still.
- 3 Gradually increase the speed and width of the vibrato. If the scroll begins to move even slightly, gradually decrease the speed and width again until the scroll is still.
- 4 Discover what makes the scroll shake: tight thumb? – side of first finger clamping against the neck of the violin? – inflexible finger? – tight wrist? – wrong direction of the vibrato movement?
- 5 Relax the hand or alter the movement, and then gradually increase the speed and width again.
- 6 Continue until the vibrato is very fast and wide without making the violin shake.

Practise each finger in low, middle and high positions on each string. Also play double stops.

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Upper arm

A common cause of tension is the upper arm being pulled close in to the body as part of the vibrato movement, instead of the upper arm staying relaxed and 'hanging' naturally. This exercise separates the vibrato action from the action of pulling the upper arm sideways.

Use the right hand as a violin 'neck' – put the left thumb in the palm of the right hand, the fingers using the back of the hand as a 'fingerboard' (Fig. 55a).

- Holding the left hand in playing position, make a normal vibrato movement (a wrist or an arm vibrato).
- While vibrating, move the right hand back so that it is above the left shoulder (Fig. 55b), making as large a space as possible between the upper arm and the body.
- Also vibrate in guitar or cello position, or with the left hand behind your head, etc. Feel how the vibrato movement can continue without the upper arm tensing, or pulling in to the right.

The violin itself can be used instead of the hand (Fig. 55c).

Fig. 55



Using the hand as a violin 'neck'



Note the open space between the upper arm and chest



The violin can be used if preferred