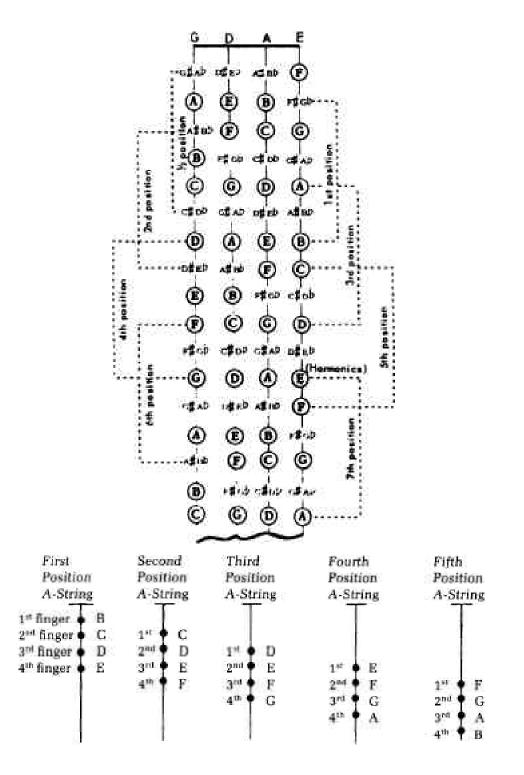


Violin Fingerings



Violin double & triple-stops

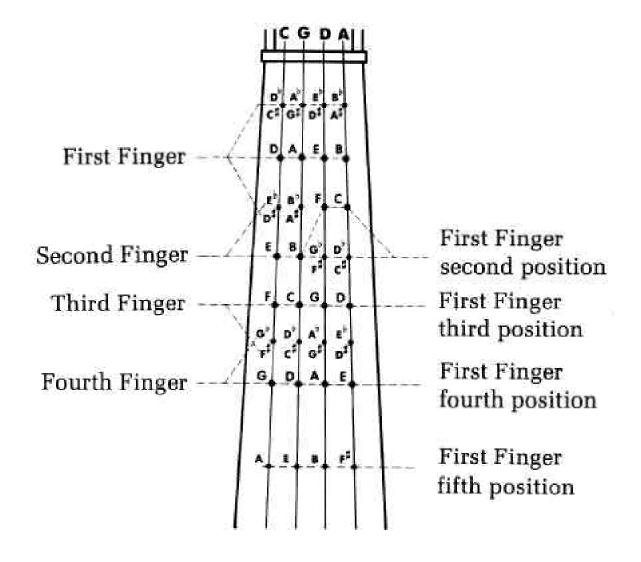




Violin Quadruple-stops

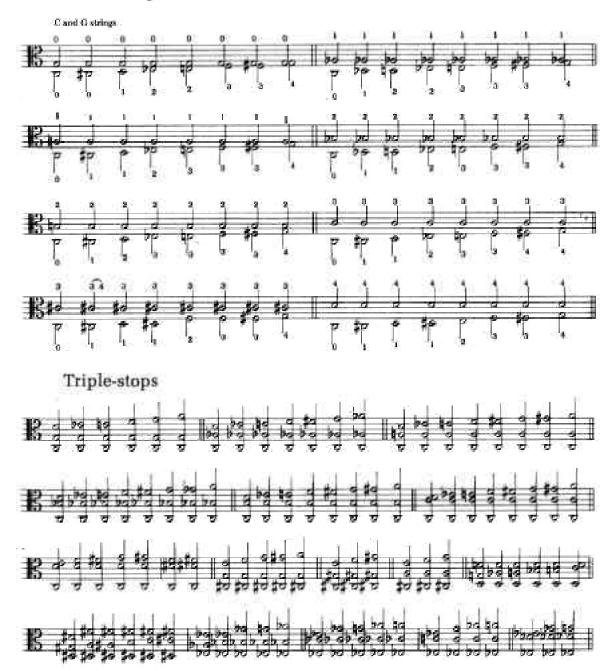


Viola Fingerings



Viola double & triple-stops

Double-stops

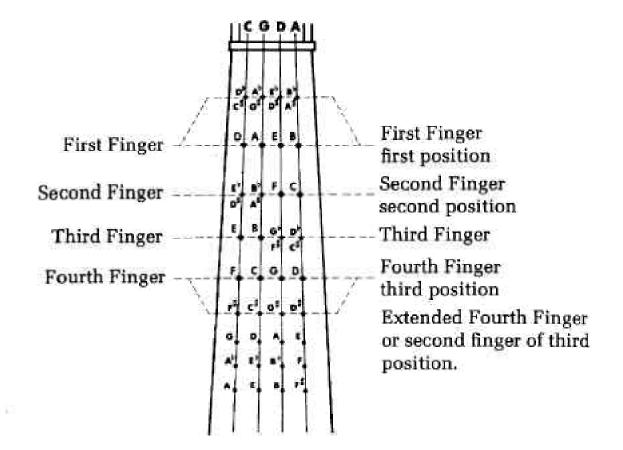


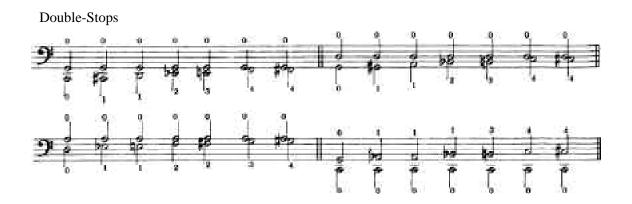


Quadruple-stops.



Violoncello





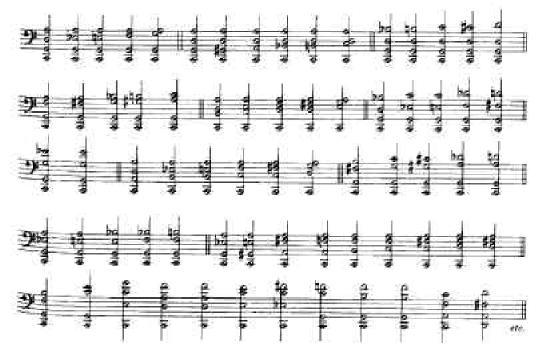
Double-Stops (continued)

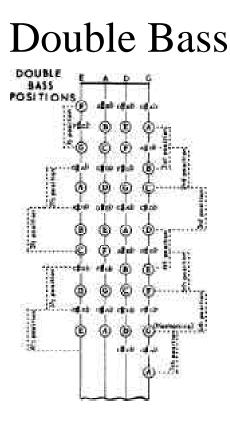


Triple-Stops



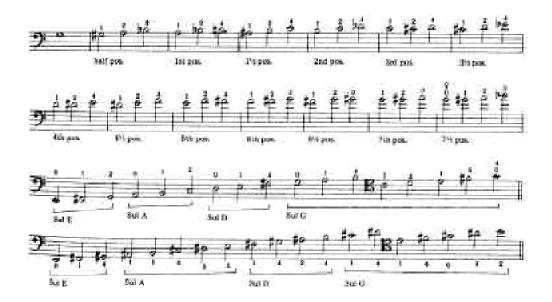
Quadruple-Stops





Bass Fingerings

The first to fourth fingers encompass a major second in the lower position. The third finger is usually not used independently but is placed on the string, together with the fourth finger up to and including the fifth position. Therefore, first, second, and third are used, and after the seventh position, the thumb is also utilized:



Bowing

General considerations:

- 1. If no slurs are marked (non-legato), each note requires a change in the directions of the bow, whether the passage is slow or fast.
- 2. Whenever a passage is slurred, all notes under that slur are performed on one bow, meaning all are played in one direction. This is called *legato* playing (*Legato* means "bind together.")
- 3. A performer will naturally begin a downbeat with a down-bow unless the composer specifically designates an up-bow.
- 4. A performer will naturally begin an upbeat with an up-bow unless the composer specifically designates a down-bow.

ON-THE-STRING BOWINGS

Détaché

This is the basic stroke on all bowed string instruments. It changes direction for each note. (See no. 1, above.) The change of bow can be made without a break in the tone. But this détaché stroke is usually performed so that one hears the articulation of the bow changes. However, the notes are not so detached, marked, or accented that the effect could be called staccato. Ordinarily, the middle to upper third of the bow is used for best result in performing détaché forté or mezzo forté at a rapid tempo.

There are instances in which the composer asks that a passage be played at the tip of the bow in order to achieve a quality of extreme lightness. The marking for this effect is: at the point; *a punt d'arco* (It.), *à la pointe* (Fr.); *an der Spitze* (Gr.).

Conversely, composers ask for a passage to be played at the frog to take advantage of the heavy stroke that can be produced there. The marking for this effect is: at the frog; *al tallone* (lt.); *au talon* (Fr.); *am Frosch* (Ger.).

A very heavy and vigorous felling can be achieved by a series of down-bows. This can be played relatively quick tempo, with the bow raised between each down-bow. It is most often performed at the frog.

Louré

This bowing, also called piqué, is a legato stroke, but a slight separation of the notes is effected while the bow is being drawn. It is a very expressive bowing used quite often in accompaniments. Louré is easily played both up-bow and

down-bow. The effect is indicated by dashes under or over each of the noteheads, with slurs to designate the bow changes.

Staccato

Staccato comes for the Italian word "staccare" meaning to detach or separate. Staccato is indicated by placing a dot over or under the notehead, can be played at any dynamic level, and is most effective at slow or moderate tempos.

Martelé (Fr.), Marcato (It.)

The derivation of this term is from the verb "to hammer." In bowing it indicates a fast, well-articulated, heavy, separate stroke, resembling a sforzando, or pressed accent. While matelé bowing is usually performed toward the frog of the bow, it can be done in the middle portion of the bow as well. The bow does not leave the string, even though there is a stop between the notes, and each new stroke is initiated with a heavy accent.

OFF-THE-STRING BOWINGS

Spiccato (or Saltando)

There are two distinct kinds of spiccato bowings. One may be thought of as the conscious *spiccato*, the other as the spontaneous spiccato. Both of these related effects depend on the speed and dynamic of a particular passage.

- 1. Conscious *spiccato*: In a slow or a moderate tempo and at a soft dynamic, the player makes a conscious effort to make the bow "spring." The pressure of the right hand is reduced, and the wrist drops the middle of the bow on the string in a semicircular motion. The notation is similar to the staccato designation, for one places dots above or beneath the noteheads
- 2. Spontaneous *spiccato:* At a fast temp with soft dynamics, the player does not have to make a conscious effort to lift the bow' rather, the short quick up-down motion controlled by the wrist alone makes the bow bounce spontaneously off the string with every stroke.

Slurred *spiccato:* this is very much like the grouped or slurred staccato, except that each of the notes is played "off the string."

Jeté (or ricochet)

The upper third of the bow is "thrown" on the string so that it will bounce, producing from two to six (or more) rapid pitches. Usually, *jeté* is executed by a downward motion of the bow. However, it can be played up-bow as well.

One should be warned that the more notes desired on one bow stroke. The more impractical this bowing becomes. In an orchestral situation, it is suggested that not more than three bouncing notes at a time be used in this bowing. Solo

players are perhaps more capable of including many more will-articulated notes on a single bow. Once again, remember also that the bow of the cello and double bass is shorter; therefore, three, or at the most, four notes to a single *jeté* stroke are quite enough.

Arpeggiando

A slightly different kind of *spiccato*, related to *jeté*, is the effect called *arpeggiando*. This may begin with a simple slurring of an arpeggio played over three or four strings at a moderate tempo. But, as the passage gets faster, the performer will spontaneously let the bow jump off the string because of the motion of his right wrist. Of course, when you begin an arpeggiated passage at a fast temp, the bow will bounce right away, and the *arpeggiando* effect will occur naturally. It is most often used in solo string and chamber music literature, but is also effective as an orchestral device.

COLORISTIC EFFECTS

Trills

As in all instruments, the trill is extensively used in the strings to color tones. The motion of one finger produces a note that alternates repeatedly with a sustained tone geld by another finger. The trill may be performed upward or downward, as the composer specifies. If one of the notes is an open string, the trill is not as effective because the open string quality is so different form that of stopped notes. The performance of a trill by sixteen violins or ten violas creates a most exciting and blurred rhythmic sensation, very different from the sound made by a single player on one instrument.

Tremolo

There are four kinds of tremolos:

- 1. Bowed tremolo, unmeasured
- 2. Bowed tremolo, measured
- 3. Fingered tremolo (or slurred tremolo)
- 4. Undulating tremolo (bowed or slurred)
- 1. Bowed unmeasured tremolo is produced by short, quick up- and down-bow strokes, repeating a single pitch as often as possible during the length of the written note.
- 2. Bowed measured tremolo is simply convenient shorthand for writing a series of repeated détaché notes to give more energy or volume to a tone.
- 3. The fingered (or slurred) tremolo is the equivalent of a trill but at an interval larger than a major or minor second. One usually indicated a precise time value for the notes to make a trill-like effect feasible. It is necessary to slur

the notes that are to be alternated to insure the legato movement of the bow. However, there are cases where a fingered tremolo is bowed detached rather than slurred; in those cases, of course, the slur is omitted.

4. The undulating tremolo is used when the two notes in the fingered tremolo are too far apart to be played on one string. The two notes are then played on adjacent strings and the bow undulates between them as quickly as possible. The undulating tremolo may be performed slurred or detached.

On the fingerboard

Sul tast (It.), sur la touche (Fr.), am Griffbrett (Ger.)

In order to obtain a rather flute-like, soft, and hazy tone, the composer may ask the performer to play with the bow over the end of the fingerboard. When the tem *flautando* is used instead of *sul tasto*, the player should play near but not on the fingerboard. The difference is really minimal, and many composers make no distinction between the two terms.

On the bridge

Sul ponticello (It.), au chevalet (Fr.), am Steg (Ger.)

This effect is produced by playing very near, in fact, right on the bridge instead of in the regular space allotted for the bow stroke. Since this produces upper partials of the tone not usually heard, it gives the pitch an eerie, metallic, and and somewhat glassy timbre. and somewhat glassy timbre. Sul ponticello is often combined with bowed or fingered tremolo.