

EncycloMedia Man *by Mike Overly*

The Curved Line Sign

Ligature

The origin of the curved line may be traced back to the **ligature**. During the 9th through the 12th centuries, music notation used early note shapes called **neumes** which had no generally accepted rhythmic length or pitch.

In the 13th century, a treatise on notation, **De Mensurabili Musica**, proposed that much in the same way that poetry was based on rhythmic time, music should also be set up in that way. The notation of these rhythms was accomplished by using ligatures of varying lengths and complexity connected to the neume.

Around 1260, Franco of Cologne published **Ars Cantus Mensurabilis**, which proposed that individual notes should have their own values. Prior to this, music followed a set rhythm pattern called **Rhythm Modes**. After the **Ars**, a musician was able to know with certainty the rhythm of the notes, and also, because of continued development of the **staff**, the individual pitches.

Both of these treatises had a profound impact on **polyphony** through the 17th century.

For the purpose of this lesson, the ligature is a graphic **curved line sign** representing more than one note of the same or different pitch performed in a single articulation. As we will see, the curved line may be used to symbolize the **tie**, the **slur**, the **trill** and the **phrase**.

Tie

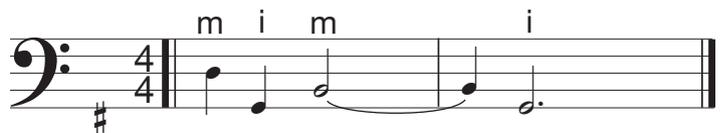
A **tie** is a curved line sign that connects more than one note of the **same** pitch and letter name. The tie indicates that these notes are to be played as a single note with a sustained sound duration equal to the sum of the individual note values added together.

The following example ties a quarter note to a

half note which results in a sustained **three beat** sound equivalent to a **dotted half** note.



The tie may also be used across the bar line to sustain a sound longer than what would be permissible by the meter.



Slur

The **slur** connects more than one note of **different** pitches and letter names. Slurred pitches are to be played without separation with a smooth and connected **legato articulation**.

In music for bowed string instruments, slurred notes are to be played in one bow.

In music for wind instruments, the slur indicates that the notes should be played without using the tongue to articulate each note.

In vocal music, slurs are used to indicate notes which are to be sung on a single syllable. This is known as **melisma**.

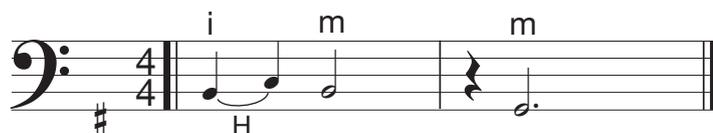
In bass music, the slur indicates that the notes should be played without plucking the individual strings and is known as **hammer-on** (low to high pitch) and **pull-off** (high to low pitch).

Hammer-on

The **hammer-on** is a technique used on a fretted stringed instrument such as bass and guitar. It is performed by plucking a string and then **slapping** a fretting-hand finger down on a higher fret of that string with enough force to cause a higher pitch to sound without plucking

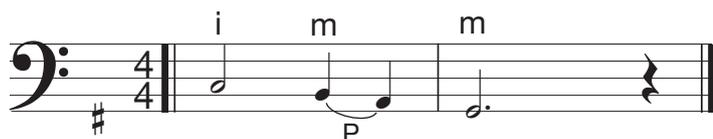
again.

In bass notation, the hammer-on is symbolized by the letter **H**.



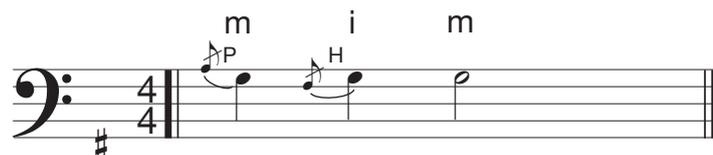
Pull-off

The **pull-off** is a fretting-hand technique that is the opposite of the hammer-on. It is performed by plucking a string and then **snapping** the string with the finger that is being used to a fret that is lower than the first note. In bass notation, the pull-off is symbolized by the letter **P**.



Grace Note

A **grace note** is smaller than a regular note and has a slash through its stem. Hammer-ons and pull-offs are often used when playing grace notes. The grace note is of short duration and is played "just before" the next relatively longer-lasting note.

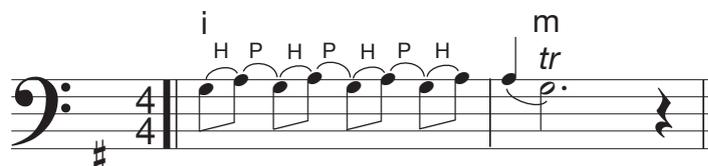


Here's something interesting. In the late 19th century, a banjo method book, **Ellis's Thorough Course For 5 String Banjo**, describes the action of performing an embellishment called the **Shake** in this way: "Strike (pick) the first note only with the right hand & the remainder of the passage with the 2nd finger of the left hand, by '**hammering on**' the string while it is vibrating." In that same book, an embellishment called

the **Snap** is described as using a "**pull-off**" technique.

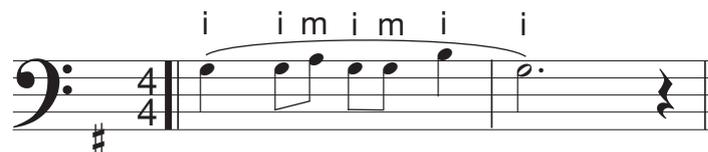
Trill

A **trill** is a series of rapidly alternating hammer-ons and pull-offs. The trill may begin on a low pitch and hammer-on to a high pitch, or, begin on a high pitch and pull-off to a low pitch. The trill sign is either *tr* or tr .

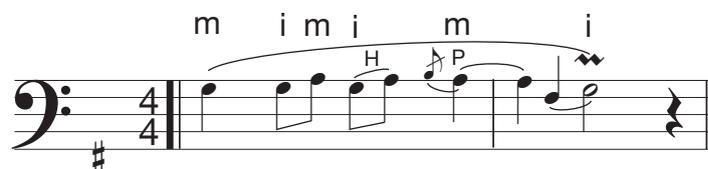


Phrase

A **phrase** is notated by a curved line over a series of consecutive melodic notes of the same or different pitch. Phrases separate a long melody into smaller sections and each phrase culminates in a weak or strong **cadence**. Think of a phrase ending as when a singer takes a breath. For example, Happy Birthday to You, (breath). Now, since a bass player doesn't need to breathe to play, the result of playing the phrase notation is called **legato phrasing**.



We'll end this lesson by combining all the curved line signs we have learned.



'Til next time, have some curved line sign fun...
I'll be listening!

Grammy-nominated Music Educator **Mike Overly** simplifies and clarifies the guitar and bass learning process with the *Tone Note® Music Method*, *Guitar & Bass EncycloMedia*, *Fretboard Flashcards* and *Fretboard Facts*. Available from Bass Books.com, Amazon.com and many other fine music book retailers around the world - just ask for them!
