# A GUIDE TO GREY LARSEN'S NOTATION SYSTEM FOR IRISH ORNAMENTATION

Over a number of years, I have developed a system of understanding and notating Irish flute and tin whistle ornamentation. This system is also applicable to the traditions of other Irish melody instruments, with some adaptations.

In my books I use this system to notate ornamentation. Since it may be unfamiliar to you, I have written this guide to explain the system. Feel free to download this document and share it with other people. It is copyrighted, however, so please credit your use of this material.

In addition to the most commonly used ornaments – cuts, strikes, slides, rolls, and cranns – there are double-cut rolls, and a variety of what I call condensed rolls and cranns. To learn about ornamentation in its full depth, I refer you to my book *The Essential Guide to Irish Flute and Tin Whistle*.

#### WHAT IS ORNAMENTATION?

When I speak of ornamentation in traditional Irish instrumental music I am referring to ways of altering or embellishing small pieces or cells of a melody that are between one and three eighth-note beats long. These alterations and embellishments are created mainly through the use of special fingered articulations (cuts and strikes) and inflections (slides), not through the addition of extra, ornamental notes.

The modern classical musician's view of ornamentation is quite different. *Ornamentation, A Question & Answer Manual*, a book written to help classical musicians understand ornamentation from the baroque era through the present, offers this definition: "Ornamentation is the practice of adding notes to a melody to allow music to be more expressive."

Classical musicians naturally tend to carry this kind of thinking with them as newcomers to traditional Irish music. However, as long as they overlay the "added note" concept onto Irish ornamentation, they will be unable to gain fluency in the language of Irish music.

## **GRACE NOTES VS. ARTICULATIONS**

Most written instructional material for Irish music ornamentation uses the *grace note*, as a term, a concept, and a notation practice. I feel that this has severely limited our thinking, that the grace note concept is the major factor constraining many people's understanding of Irish ornamentation.

Using the concept of the *articulation*, instead of the *grace note*, allows us to understand ornamentation much more clearly. For our purposes, I define an articulation as *that extremely brief sound component of a note that defines its beginning or attack*. To articulate a note is to create or define its beginning or attack.

## TWO WAYS TO ARTICULATE A NOTE

With the flute and tin whistle, we can articulate a note in two ways.

One is to briefly stop and then restart the flow of air that we direct into the instrument. We do this with our tongue or glottis and call it tonguing or throating. (The latter is my own term for articulations formed in the throat.) When we restart the airflow, we give the sound an attack by an action of our tongue or glottis. We perceive this attack as the beginning, or articulation, of a new note. We can call these *breath articulations*.

The other, very different way to articulate a note is by the use of a finger movement. Imagine these two scenarios:

- 1. You are playing a low G. Without interrupting the flow of air *in any way*, you lift the middle finger of your top hand (the hand nearest the embouchure hole of the flute, or the mouthpiece of the whistle) and, as quickly as possible, you put it back down onto its hole. The air has continued to flow through the flute or whistle and the sound has not been interrupted at all.
- 2. You are playing a low G. Without interrupting the flow of air *in any way*, you throw the index finger of your bottom hand (the hand nearest the foot of the flute or whistle) at its finger hole, allowing it to bounce back as quickly as possible. The air has continued to flow through the flute or whistle and the sound has not been interrupted at all.

The first scenario yields a *fingered articulation* called a **cut** (also known as a chip, grace, grace note, or upper grace note). By lifting and replacing the middle finger of your upper hand, you *are* (technically speaking) creating an additional note. **But** - if that note is brief enough, our brains cannot discern its pitch or duration, and we perceive it **not** as a note, but instead as the *articulation* of a new G note. It is critically important to understand this distinction. (There is no consensus on which fingers to use to play cuts. I have strong opinions on this. If you are interested, see my books.)

The second scenario yields a *fingered articulation* called a **strike** (also known as a tip, tap, slap, pat, or lower grace note). By bouncing the index finger of your lower hand off of its finger hole, you *are* (technically speaking) creating an additional note. **But** - if that note is brief enough, we cannot discern its pitch or duration, and, as with the cut, we perceive it **not** as a note, but instead as the *articulation* of a new G note. (Luckily, everyone seems to agree on which fingers to use for strikes).

If you are having trouble following this, be patient. It will all become clear in time. For much more on this, see my two books, *The Essential Guide to Irish Flute and Tin Whistle*, and *The Essential Tin Whistle Toolbox*.

#### HATS OFF TO THE PIPES

Irish flute and tin whistle ornamentation techniques have their origins in the tradition of the uilleann pipes, the current bellows-blown bagpipe of Ireland, whose music developed out of the older pastoral bagpipe and *píob mór* traditions. The capabilities and limitations of these antecedent bagpipes sheds important light upon why many uilleann pipe, Irish flute, and tin whistle ornamentation techniques have evolved as they have.

With these older bagpipes, there was no way, in the midst of a tune, to stop and then restart the flow of sound (i.e. there was nothing analogous to tonguing or throating). Therefor, when playing, in succession, two notes of the same pitch, these pipers had to use a fingered articulation to define the

beginning of the second note. The fingered articulations that they must have invented for this purpose have come down to us as the cut and the strike. They in turn give rise to the multi-note ornaments that make use of cuts and strikes, namely *rolls* and *cranns*.

Bear in mind that cuts and strikes are not used only on repeated notes. They are also often used when ascending or descending to a note (though strikes are not usable when ascending to certain notes). For more on this, see *The Essential Guide to Irish Flute and Tin Whistle*, or *The Essential Tin Whistle Toolbox*.

## SAY GOODBYE TO GRACE NOTES

In other books, as far as I know, the cut and strike have been universally presented and notated as *grace notes*, and this is where so much confusion arises.



Figure 1. The conventional, misleading way of notating a cut as a grace note.

Cuts and strikes are very plentiful in Irish music. If you think of each cut and strike as a new, additional note unto itself (each one represented as a grace note), your thought-picture of the music can become extremely crowded, cluttered, and rhythmically problematic.

Cuts and strikes are articulations that function in the same way as breath articulations. But I know of no one who has suggested notating tongue articulations as grace notes. That is because tongue articulations have no discernable duration or pitch of their own. The same is true of well-played cuts and strikes.

## A NEW CUT NOTATION

Since a cut is an articulation, I notate it as a slash placed over its parent note.



Figure 2. A new symbol for a cut.

This is a simple, clean notation that reflects the reality of the cut's sound and function. There is only one note here, not two. There is no indication or implication of pitch or duration for the cut. The notation is similar visually to other markings, such as staccato markings or accents, which are placed above the note they affect.

#### FINGERING NOTATION

In my books, I call the hand nearest the embouchure hole of the flute, or the mouthpiece of the whistle, the *top hand*. The hand nearest the other end, the foot of the flute or whistle, I call the *bottom hand*. Either of these can be the right or left hand, though most people play with the left hand as the upper hand and the right hand as the lower hand.

I call the top hand index finger T1, the top hand middle finger T2, and the top hand ring finger T3. Similarly, I call the bottom hand index finger B1, the bottom hand middle finger B2, and the bottom hand ring finger B3. This notation system works equally well for right-handed and left-handed players.

#### THE MOVEMENT AND FINGERING OF THE CUT

The movement of the cut is a very small and quick lift of a finger completely off its hole and the immediate replacement of that finger. When executed well it can be almost invisible. The finger barely needs to move from the hole, though it does completely uncover it. It is very important to keep your hands relaxed when learning and using cuts. Though it seems to be human nature to do so, don't tense up while trying to make your cuts quick and crisp. There is no consensus on which fingers to use for cuts. My system is different from what most players use, and I explain why in my books. I cut D with B2, E with B1, F-sharp with T3, G with T2, A with T1, and B also with T1.

#### ARE CUTS AND STRIKES ORNAMENTS?

Cuts and strikes, our fingered articulations, are commonly referred to by Irish musicians as "ornaments". Since this is such a long-established custom, I feel I must conform to it. Cuts and strikes *do* have a pitch element. Perhaps for that reason they convey an "ornamental quality" to our ear. Other articulations that do not have a pitch element, such as tonguing and throating, do not strike us as ornamental.

Still, I feel it is more accurate to define cuts and strikes as articulations. Since they are so central to Irish ornamentation, the ramifications of defining them this way are quite far-reaching.

#### **MID-NOTE CUTS**

Sometimes you will want to place a cut in the midst of a note. I call this a mid-note cut. In Irish dance music, it usually sounds best to place the mid-note cut squarely on a subdivision of the pulse. Here is an example of a cut placed mid-way through a quarter note:



Figure 3. A measure from **The High Reel**. Note the mid-note cut, halfway through the duration of the first note.



Figure 4. The same measure from **The High Reel**. Here the same music is notated differently. The measure starts with two tied eighth notes on A. The cut articulates the second one.

#### THE PHYSICAL MOVEMENTS AND FINGERINGS OF THE STRIKE

The strike is well named, for its crisp sound is due to its percussive nature. In performing a strike one "throws" one's finger at its tone hole so that it hits the instrument at a high velocity. Due to that velocity the finger bounces back of its own accord, making it unnecessary to lift the finger off its hole. As with the cut, your fingers must be relaxed, though not limp.

Unlike cut fingerings, strike fingerings seem to be universally agreed upon. As a rule, and this one has no exceptions, a strike on any given note is performed on the open tone hole closest to the flute's embouchure hole or the whistle's mouthpiece. For example on the note E a strike is performed with B3. For F sharp you strike with B2, for G with B1, for A with T3, for B with T2, for C natural (using the normal cross fingering) with T1 and for C sharp also with T1. You cannot do a strike on D

#### A NEW STRIKE NOTATION

Since a strike is an articulation, I notate it by placing a V over its parent note.



Figure 5. The symbol for a strike.

This symbol graphically illustrates the downward velocity, impact and rebound of the strike. This is a simple, clean notation that reflects the reality of the strike's sound and function. Neither pitch nor duration are indicated or implied. There is only one note here, not two. Just like the cut, and for the same reasons, the strike is not a grace note. (Don't confuse this symbol with the *upbow* indication for bowed string instruments).

#### **MULTI-NOTE ORNAMENTS**

Most multi-note ornaments are constructed by combining in sequence, almost always slurred together, two, three or four articulated notes in eighth, sixteenth or, rarely, thirty-second-note

durations. You can see that the number of possible combinations is enormous. Luckily for us only a fairly small number of these combinations are used in Irish music.

# LONG AND SHORT ROLLS AND CRANNS

Rolls and cranns exist in long form (three eighth-note beats in duration) and short form (two eighth-note beats in duration). The classification of rolls as *long* and *short* is widely recognized and used by traditional players, though there is not a clear consensus on the exact meaning of long and short rolls. The classification of cranns as long and short has not been as widely recognized.

#### NORMAL VIEW AND EXPLODED VIEW

In the following pages you will encounter notated musical examples that are given in *normal view*, *exploded view*, or both.

Exploded view shows what happens inside of each multi-note ornament. Each of the ornament's constituent notes are depicted, complete with each note's articulation (cut, strike, or tongue/throat).

*Normal view* represents the multi-note ornament as a single note with a special symbol above it. This is how I notate such ornaments in the tune transcriptions.

#### THE LONG ROLL

The **long roll** is the most commonly used multi-note ornament. It is something very simple and lovely: *a group of three slurred eighth notes of the same pitch, each one having a different articulation*. The first note is either tongued, throated or slurred into from a preceding melody note; the second note is cut; and the third is struck. In my notation, what I have just described looks like this:



Figure 6. A long roll on G, shown in exploded view.

#### USING AN ACCEPTED SYMBOL

There is a symbol in common usage for rolls in general. Pat Mitchell, in his book *The Dance Music of Willie Clancy*<sup>2</sup> writes that Breandán Breathnach devised this symbol to stand for rolls and cranns in his very influential series of tune collections *Ceol Rince na hEireann*<sup>3</sup>.

Unlike Breathnach, I use the symbol very specifically, as shown in Figure 7, to indicate the *long* roll only. I give other types of rolls and cranns different symbols, as you will soon see.

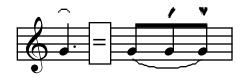


Figure 7. The symbol for a long roll, and what it means.

Note that this crescent shaped symbol is above a dotted quarter note. The long roll is three eighth notes in duration, the same length as a dotted quarter note.

#### **CLEARING AWAY SOME FOG**

Almost universally the long roll has been described and taught as a five-note ornament. This is due to the prevailing custom of thinking of cuts and strikes as grace notes. Add two grace notes to the three principal notes and you get five notes. The problem is, when you listen to a well-played long roll, you only hear three notes!

Cuts and strikes are not to be thought of as notes. We should think of them as articulations. Once that is understood it follows that the notion of the five-note long roll represents an unnecessary and misleading complication.

## ILL-CONCEIVED NOTATION

Figure 8 shows some examples of long roll notation taken from some published whistle and flute tutors.



Figure 8. Examples of misleading long roll notation taken from some flute and whistle tutors.

None of these examples look like what a long roll sounds like. None of them accurately convey the rhythm of the long roll. They all imply that the exact pitch of the cut and strike are perceivable and significant. None of them show that the sounds of the cut and the strike are qualitatively different from each other. If anyone, not already *knowing* what a long roll sounds like, tried to accurately reproduce what was notated in these examples they would get *nothing* that sounds like a long roll.

When one is first learning cuts and strikes and cannot yet make them brief enough, a long roll will indeed sound like it has five notes. Perhaps since everyone started out playing them that way we have retained some vestige of our old perceptions in our notation practices.

But why not notate them the way they sound when played well, especially since that notation is much simpler to read and write?

## THE SHORT ROLL

The **short roll** can be most easily grasped as a long roll missing its first note. Thus the short roll is a group of two slurred eighth notes of the same pitch, each one having a different articulation. The first note is cut, and the second is struck. What I have just described looks like this:



Figure 9. A short roll on G, shown in exploded view.

It is essential to understand that the short roll occupies only *two* eighth-note beats whereas the long roll occupies three (see Figure 10 below).

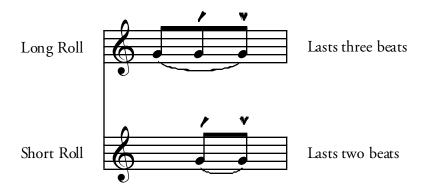


Figure 10. Comparison of long and short rolls.

# A NEW SYMBOL

I have modified the symbol in common usage for rolls to create a symbol specifically for the short roll. It is shown below in Figure 11.



Figure 11. The symbol for a short roll on G, and what it means.

Note well that the short roll symbol appears above a quarter note. The short roll is only two eighth notes in duration, the same duration as a quarter note.

Notice that the short roll symbol is the long roll symbol with a slash through it. This shows that the short roll is a shortened form of the long roll. The slash, being the symbol for the cut, also draws attention to the fact that a cut initiates the short roll.

#### NOW THAT THE FOG HAS CLEARED

By now you are thoroughly familiar with my opinion that cuts and strikes are articulations, not notes or grace notes of any kind. Thus you understand that the short roll is a two-note ornament, and not a four-note ornament as it has been almost universally described in published whistle and flute tutors. Figure 12 below shows some examples of unfortunate, ill-conceived short roll notation taken from such books.



Figure 12. Examples of ill-conceived short roll notation taken from some flute and whistle tutors.

All of these examples are incorrect and misleading. None of them look like what a short roll sounds like. None of them accurately convey the rhythm of the short roll. They all imply that the pitch of the cut and strike are perceivable and significant. If anyone, not already knowing what a short roll sounds like, tried to reproduce what is notated in these examples they would not get anything that sounds like a short roll.

Why not notate them the way they *do* sound, especially when that notation is much simpler to read and write?

#### THE RHYTHMS OF LONG AND SHORT ROLLS

When learning to play long and short rolls it is critically important to learn to play them absolutely dead even, without a lilt, each eighth note articulated right on its beat. You will not always *want* to play rolls so evenly, but you will need to be able to when playing tunes at very fast tempos. The evenly played roll is your solid base from which you can depart and experiment.

It is also important to know how the long roll relates to the underlying pulse of the music. When the first eighth note of a long roll does not begin on a pulse or strong beat, the second or third eighth note always does. You want to be sure you can place on-pulse notes accurately.

Short rolls almost always begin on a pulse or strong beat.

#### **LONG CRANNS**

It is not possible to do a roll on D because there is no way to strike a D (on the simple-system flute, tin whistle, or uilleann pipes). Yet D is such a critically important note in this music. How can we use ornamentation to draw attention to it?

One answer is the **crann**. The crann is an ornament that comes from the uilleann piping tradition. It makes use only of cut notes, no strikes.

Cranns are traditionally played not only on D but on E as well, especially by pipers. They can be played on other notes too, but we rarely hear that with traditional flute and whistle players who seem to prefer rolls over cranns where rolls are possible.

The **long crann** is comprised of four slurred notes: an eighth note, two sixteenth notes and another eighth note. The second, third and fourth notes are cut. See Figure 13 below.



Figure 13. A long crann on D, shown in exploded view.

#### A NEW SYMBOL

I indicate a long crann as shown below.



Figure 14. The symbol for a long crann on D, and what it means.

You can think of the symbol as the letter C (for crann) or as the long roll symbol turned on its side.

# FINGERING THE THREE CONSECUTIVE CUTS IN CRANNS

Consecutive cuts in cranns are not performed with the same finger.

In uilleann piping these three cuts are often played by three different fingers. Many flute and whistle players have directly adopted such piping fingerings to their instruments. Cutting D with a finger as high as T3 works very well on the pipes. But the responsiveness of this fingering on the flute is not as good, and it is particularly weak in the second octave.

I find that cranns on the flute sound tighter and more well-defined if you finger them this way. Play the first cut with B2. Play the second cut with the next finger up (toward the mouthpiece or embouchure), i.e. B1. For the third cut, go *back* to using the normal cutting finger. To see how this works on a low D long crann see Figure 15 below.

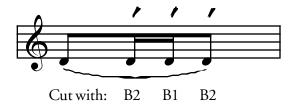


Figure 15. The fingers to use for the cuts in a long crann on D.

This fingering pattern allows you to change fingers for each cut of the crann and still use the most responsive cuts possible. Beginning and ending with B2 enables you to use the most responsive cut fingering twice, for the two cuts that fall on the most important subdivisions of the beat.

## THE SHORT CRANN

The **short crann** is comprised of three notes: two sixteenth notes and an eighth note. All three notes are cut. Note that when you remove the first note of a long crann you get a short crann.



Figure 16. A short crann on D, shown in exploded view.

The short crann is quite tricky to play in context, just like the short roll, because there is no preparation note before the first cut. The long crann on the other hand, like the long roll, does start with a preparation note, making its first cut the easiest kind, the cut between notes of the same pitch.

Sometimes you will hear players leave out the first cut of the short crann. This results in a simpler, softer crann with less attack. I encourage you to learn to play the short crann with all three cuts. You may then choose to omit the first cut as a matter of musical expression, not one of technical limitation. You will find that it is sometimes easier to execute the full three-cut short crann when you articulate it with tonguing or throating.

#### A NEW SYMBOL

I notate a short crann as shown below.



Figure 17. The symbol for a short crann on D, and what it means.

The symbol is that of the long crann with a slash through it. This shows that the short crann is a shortened or truncated form of the long crann. The slash, being the symbol for the cut, also draws attention to the fact that a cut note initiates the short crann. Note well that the symbol appears above a quarter note. The short crann is only two eighth-note beats in duration, the same duration as a quarter note.

#### **ALTERNATIVES TO THE CRANN**

The crann is a difficult ornament to master. Traditional players often make use of small melodic variations as alternatives to the crann.

One of the most common and specific examples of this is shown in Figure 19 below.



Figure 18. A long crann on D, shown in exploded view.



Figure 19. A melodic alternative to a long crann on D.

A similar variant can be used in place of a short crann.



Figure 20. A short crann on D, shown in exploded view.



Figure 21. A melodic alternative to a short crann on low D.

This same variant can be used, played an octave higher, to take the place of a short crann on high D. Or, you could use this one:



Figure 22. A melodic alternative to a short crann on high D.

#### THE SLIDE

The **slide** is quite different from the cut and strike in several ways. First, it is not an articulation. It is an *inflection*. It is not played or heard as an "instantaneous" event, as are the cut and strike. It is a continuous, moving alteration of a note's pitch. In the classical world, the slide is often referred to as a *portamento*. Some Irish players refer to a slide as a *slur* or *smear*, but slur has another, more widely accepted meaning. To slur is to connect two or more notes such that only the first note of the group is articulated. A slurred group of notes is played using an uninterrupted, continuous stream of air. It is therefore best not to use the word slur for a slide.

When I speak of a slide I am referring to a musical gesture that is accomplished using a finger technique. Note that pitch slides can also be accomplished by breath techniques, quite independent of the fingers. Fingered slides offer much more in speed and agility.

The cut and strike create the attacks of their parent notes and are therefore fixed in their temporal relationships to them. The slide exists independent of these considerations. The concept of a parent note is not always useful in regard to the slide. A slide can begin before the attack of a note, or after. It can be very brief or very long. It can be a way to move from one note to another and can therefore affect both notes. The slide is the free spirit of single-note ornaments and, as such, it can get carried away if you don't watch out, giving your playing a slurpy, even drunken feeling.

Slides can rise or fall in pitch, but rising slides are used more often in Irish music than falling slides.

# THE PHYSICAL MOVEMENT OF THE SLIDE

When you slide you are gradually, and sometimes only partially, covering or uncovering a finger hole in such a way that the pitch of the note you are playing at that moment rises or falls gradually. By the way, the word *slide* refers to what happens to the *pitch* of the affected note or notes, not necessarily what the finger *does* to achieve that sound. Sometimes you do slide the finger off the hole, but other times you may tilt, rock, or roll it slightly instead.

Sliding is easy and natural on the tin whistle, simple-system flute and uilleann pipes since the fingers come into direct contact with the finger holes. Sliding is possible, but not as natural, on open-hole Boehm-system flutes because of the key mechanisms that intervene between the fingers and the tone holes themselves. Sliding is virtually impossible on the closed-hole Boehm-system flute. This difference is certainly one of the reasons why the simple-system flute is preferred by almost all Irish flute players. For more information on this see Appendix B in *The Essential Guide to Irish Flute and Tin Whistle*.

The finger movement of the slide should be one that leaves your hand in good playing position once the slide is complete. You'll find much more on this and other aspects of slides in both *The Essential Guide to Irish Flute and Tin Whistle* and *The Essential Tin Whistle Toolbox*.

## TWO CLASSES OF SLIDES

Slides fall into two classes according to:

- 1. their relationship to the melody, and
- 2. the fingerings they require.

The **simple slide** directly connects two consecutive notes in a melody, "filling in" the interval between them. Clearly, this kind of slide moves in the same direction as the melody. In sliding from one melody note to the next, the only finger or fingers moving are the same ones that, in normal playing, you would use to simply go from the first note to the second. For example, when moving from A up to B using a simple slide, one simply removes T2 *gradually* from its hole.

The added-finger slide requires the involvement of an *additional* finger, one that is not normally used in moving from the first melody note to the next. The pitch slide does not occur within the interval formed by the two melody notes, but *outside* of this interval, and it moves in the direction opposite to that of the melodic movement. For example, when moving from G down to E and using an added-finger slide, you put down B1 and B2 in a normal fashion to move from G to E, and, at the *same* time, B3 covers all or part of its hole and immediately moves smoothly off of it to produce a pitch slide up to E from below. The melodic movement from G to E is downward, but the movement of the pitch slide is upward, rising to E from below.

Both simple and added-finger slides can occur in rising and falling forms.

# A SLIDE NOTATION

In Figures 23 and 24, I show my slide notation symbols for rising and falling slides.



Figure 23. The symbol for a rising slide.



Figure 24. The symbol for a falling slide.

#### THE SHAKE

There is a lovely ornament that I have heard in the playing of three great tin whistle players: Mary Bergin, Donncha Ó Briain, and Breda Smyth. I call it a **shake**. It is an alternative to the crann on the second D.

To play a shake you use a special fingering for C-sharp by covering the B1, B2, and B3 holes. To get from there to the second D you simply add the T2 and T3 fingers. These two fingers are in motion as a unit when playing a shake.

The shake is a four-note ornament consisting of three very rapid ornamental notes: C-sharp, D, C-sharp again, and then the principal note of D. It begins right on the beat. My symbol for the shake appears below.



Figure 25. A symbol for a shake.

This symbol graphically mimics the sound of the shake. It has four "points" that progress rapidly from low to high to low to high, just like the pitches of the notes of the shake. It does look similar to the classical symbol for the *schneller* or *inverted mordent*, but don't be confused. It is not the same.

The shake is related to the trill, in that it is an alteration of an ornamental note with the principal note, but the baroque ornament called a *mordent* comes the closest to resembling the shake. A mordent is the same as the second, third, and fourth notes of the shake. It begins on the principal

note, not the note below it. A mordent preceded by an *appogiatura* could be seen as the same thing as a shake.

## **REPEAT SIGNS**

In my books I use some common practice repetition signs and indications. In case you are unfamiliar with them:

- "D. C." stands for *da capo*, an Italian phrase meaning "from the beginning", or literally "from the head". This tells you to repeat from the beginning of the tune.
- "D. S." stands for *dal segno*, an Italian phrase meaning "from the sign". This tells you to repeat not from the beginning, but from a different location marked by a *segno* (i.e. "sign"). The *segno* looks like this: %.
- A thin-thick double barline preceded by two dots (:|| ) is a left-facing repeat sign. It tells you to go back to the a right-facing repeat sign (||:), or, if there is none, back to the beginning of the tune.

<sup>&</sup>lt;sup>1</sup> Valery Lloyd and Carole L. Bigler, *Ornamentation, A Question & Answer Manual*, (Van Nuys, California: Alfred Publishing Co., 1995), p. 8.

<sup>&</sup>lt;sup>2</sup> Pat Mitchell, *The Dance Music of Willie Clancy* 2nd ed. (Dublin: Mercier Press, 1977), p. 12.

<sup>&</sup>lt;sup>3</sup> Breandán Breathnach, Ceol Rince na hÉireann, Vol. 1 (Dublin: An Gúm, 1963).