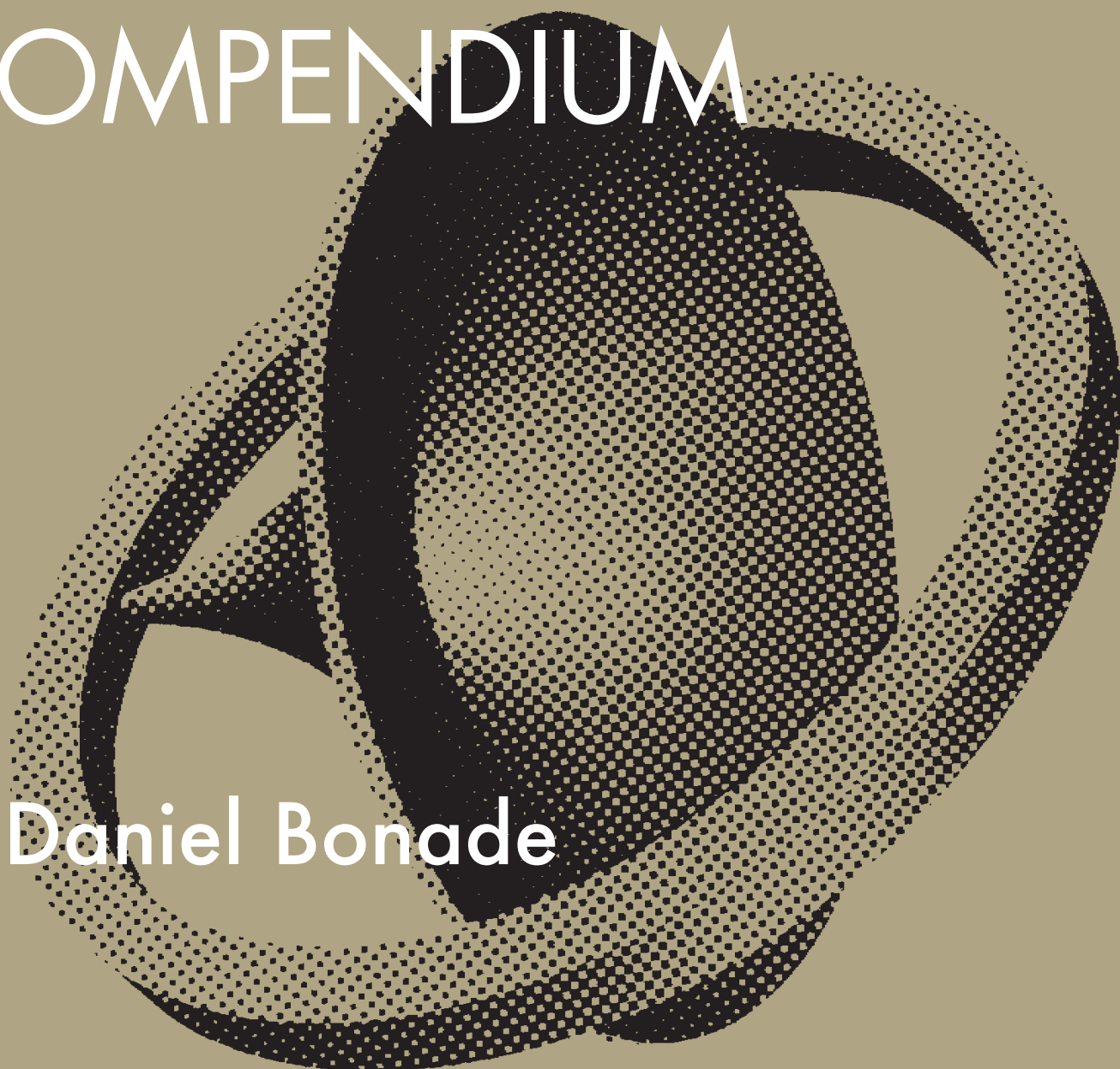


# CLARINETIST'S COMPENDIUM

by Daniel Bonade



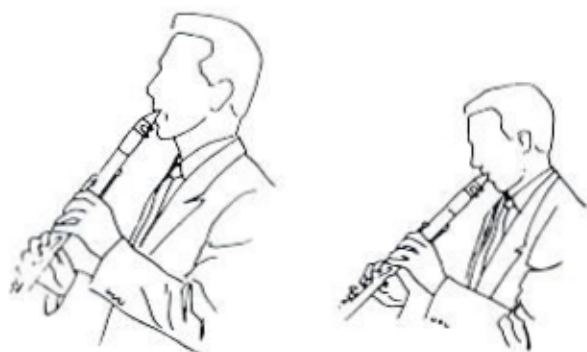
## Production of Good Tone

### Posture

Correct posture in playing the clarinet is most important as, from it, depends the correct position of the mouthpiece in the mouth and subsequently a perfect embouchure, on which also depends the flexibility of tone for phrasing. The correct posture can be described thus: Body well erect, head looking horizontally forward. The clarinet then should be brought upward to the mouth by the forearms, without bowing the head toward the mouthpiece. Upper arms should stay perpendicular to the body.



EXAMPLES OF INCORRECT POSTURE



CORRECT POSTURE

INCORRECT POSTURE

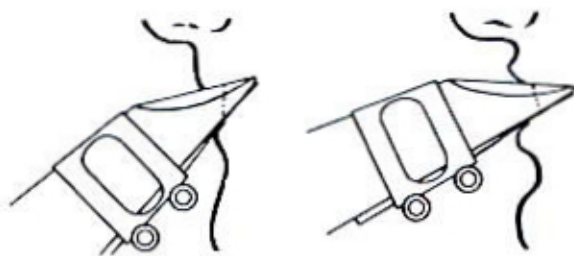
(Head inclined toward mouthpiece)



CORRECT POSTURE

### Position of the Mouthpiece in the Mouth

The mouthpiece should be laid on the lower lip (curved inward against the teeth), at about an inch and a half from the tip of the reed, at a 45 degree angle, then the upper jaw should close on the upper part of the mouthpiece, upper teeth falling naturally at about half an inch from the tip of the mouthpiece.



CORRECT

INCORRECT

MOUTHPIECE POSITION MOUTHPIECE POSITION

By following these rules one is assured that the mouthpiece will set at the correct angle in the mouth, therefore insuring a good embouchure. At this time I would advocate practicing the clarinet in a standing position, rather than sitting down. I admit that it makes playing much harder for beginners but in the long run it will bring better results as it will eliminate complacency in over-relaxing. In band playing, the little folding chair, that is predominantly used, should be discarded for clarinet sections as it induces a slouching position of the players, the back of the chair being slanted too far back, preventing an erect position of the body as prescribed above.

## Breathing

It will then be noticed, in this mode of embouchure, the lower jaw pressure is *not* opposite the upper jaw pressure, thus permitting more opening of the reed, consequently allowing more vibrations and better control of playing (as the lower pressure rests on the more resisting part of the reed, as shown further on) and better attack, as the reed will respond more freely, not being squeezed tightly on the mouthpiece.

### Blowing

The tone should be produced in the same manner as one would use to blow out a candle from a distance—that is, with a small stream of wind, as intense as possible, projecting the tone out of the instrument, as a good singer uses his voice. Then the next important requirement is proper breathing.

### Breathing

Breathing should come from the diaphragm. That is, when taking a breath the player should not raise his shoulders and fill only the upper part of his lungs but should, while inhaling, feel that the air fills his lungs all the way to the bottom, thus expanding the diaphragm, which will then work as a regulator in releasing the wind either rapidly or slowly, through the mouth into the instrument. (The diaphragm is in a thin, broad muscular partition that divides the chest from the abdomen, also called midriff).

### Slur

One of the main requirements for good clarinet playing is to know how to slur (legato) properly and this is, for the more advanced student, absolutely necessary. The motion of the fingers, playing from one note to another, must be so smooth as to avoid any interruption of tone, and eliminate any slapping (or hammering) noise of the fingers on the instrument. This can be achieved by practicing slow finger action from a prescribed distance from the hole or key to be closed.



These exercises from Rose 40 Studies No. 1 are recommended when the slow motion of the fingers has been mastered. Then Rose 40 No. 9 is the best for a "quicker" slow motion practice. In developing this art, one will find that playing fast passages, one has acquired a smooth, running technique, necessary for high class performances, cadenzas, etc.

Do not forget that it is the space in between the notes that has to be filled in, so as to sustain the tone consistently.

I have successfully taught this system to oboe, flute and bassoon players as well as clarinetists.

### Staccato

Staccato is an interruption of the tone by touching the tip of the tongue to the reed, and *not* by a hitting motion. When making a succession of staccato notes one should remember that the tongue should always be on the reed between staccato notes, while the finger or fingers should move quickly, preparing the next note ahead. This anticipated preparation will be very beneficial and useful as it forces the eye of the player to read always one note "ahead" and will develop faster reading of music, even in legato playing. Staccato should be practiced very slowly, playing with a fast motion of the fingers after each played note. Do not forget that the tempo (speed) at which you play, determines how short staccato and articulations should be made. Take the following passage:



Played slowly, the staccato will become legato staccato:



Where played at a fast or faster speed becomes:



Same applies to such an articulation:



Slow:



Will at a fast speed be interpreted:



(See Chapter 3 for more detailed information)

**Articulation**

Precise articulation presumes a properly developed staccato. Articulations can be classified thus:

Single staccato notes according to speed needed	}	long—(legato staccato)
		medium—(ordinary)
		short—(fast staccato)
		very short—(staccatissimo or pizzicato)

Two notes slurred, one staccato



Two notes slurred, two staccato



One staccato, two slurred, one staccato (syncopation)



Two notes staccato, two slurred



Three notes slurred, one staccato



There are other articulations according to division of beat, but all derive from the above.

In playing any of these articulations with a short staccato and at a medium speed, the first note of each slur should be slightly accentuated, the last note of the slur should be clipped short and the finger should move to the next note (while tongue is on the reed) very rapidly, then staccato should be played



The only exception to this rule is, when playing a passage such as



where it will be noticed that usually the first note (staccato) is a melodic note and the next two (or three) are accompaniment notes, so obviously, the melodic notes must be heard louder than the accompanying ones:



Now, as stated above, the last note of any slur must be clipped, so as to permit the fingers to be ready for the following note, but *only* when the next note is a staccato note. When a slur is followed by another slur



there is no shortening of the last note of the slur unless these succeeding slurs are off beat (or syncopated)



A syncopated articulation always requires an accent on the 1st note of the slur.

**Tips on Articulations**

Taking for granted that one can play articulations correctly, as described above, there are a few pointers in "interpretation" of articulations. Here they are with examples:

When an eighth note is followed by sixteenth notes, or in a slower tempo, quarter notes followed by eighths or sixteenths:



The first note (eighth or quarter) should always be played short:



At the end of a run



the last note should be played the same length as the preceding notes



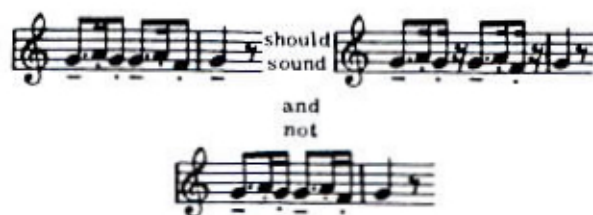
even if written as an eighth.

Another example:



At this point I want to emphasize that all these explanations of articulation are for technical playing. In phrasing they can sometimes be interpreted a little differently—especially according to the speed required.

**6/8 Time articulation.** In a 6/8 time beaten in two (not divided in 6) one has to be careful not to shorten the 3rd and 6th eighths of the bar to avoid giving the rhythm of a 2/4 bar.



This figure is often badly played if the rule above is not respected.

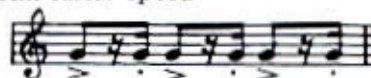


articulation is one of the most misconstrued by many players, because there are two ways to interpret it. First, at a lively pace and second, at a slow tempo.

At a fast tempo the sixteenth becomes rhythmical, that is, played short (as in a march, for instance) and the dotted eighth becomes the main accented note



or at a still faster speed



the dots of the eighths being played as rests.

At a slow tempo (as in phrasing—see example below) the sixteenth of this combination becomes a phrasing sixteenth and therefore takes predominance over the dotted eighth and should be played accordingly:



with a stress, and a shade louder than the eighth. Notice that any way this combination is played there should *always* be a slight stop after each dotted eighth, before playing the sixteenth

as the sixteenth is related to the following eighth and not to the preceding one (even in slurring)



### Dynamics

The first thing to remember while playing phrasing is that, what one *intends* to do in performing dynamics does not suffice; it is how the playing sounds that is important. Many students, when told or taught, to make a crescendo or a diminuendo "believe" that they are doing so, but, unless they exaggerate these dynamics one hundred per cent, they will scarcely be unnoticeable. A crescendo from *mf* to *f* does not sound crescendo. To give the effect of crescendo, the least one can blow is from *p* to *f* or *mf* to *ff* or *ppp* to *mf* and so forth.

### Flexibility

To attain a great flexibility in contrast of dynamics I recommend this very good exercise:



Play the first note (G) very loud (watching that the quality of tone remains nice) and, without any preparation of embouchure, slur quickly to the upper note (B) as pianissimo as possible—without any interruption of the slur, of course, and without slapping the fingers on the clarinet. Then, still without taking a breath, attack quickly *very forte* (like the preceding G) the next low note (B) slurring again to the upper D pianissimo, etc. Be sure to play at least two groups of two notes before taking a breath. Each note should be held a full half note. This is what I call "Practice of the extremes, in dynamics production". Once one masters the extremes with skill (*fff* to *ppp* or opposite) the next in the gamut of nuances become an easy matter, besides developing a great flexibility of tone and embouchure.

### Motion of Fingers When Phrasing

In my estimation, the thing that is most distracting when hearing a beautiful phrase, is to be disturbed by lack of continuity in the succession of notes due to the hammering effect made by the fingers when they are moved on the in-

strument. This applies not only to clarinetists but to oboe, flute and bassoon players alike. This obnoxious noise comes from a hard and machine-like motion of the fingers and results chiefly from practicing fast playing to develop fast technique. Of course, when playing a technical passage, the fingers have to move fast, accurately and rhythmically perfect, but when applying this technique to slow playing and phrasing, the effect is disastrous, as it prevents the perfect "going" from one note to another with smoothness and fine intensity, like the human voice can so well produce, even without any training. The human voice being the most perfect musical instrument produced by nature.

The art of phrasing for a good player is, then, to try to imitate this wonderful instrument, the human voice, not only in sound but also in intensity, emotion, feeling, expression and beauty. In other words, a player should not be afraid of artistic exteriorisation of sentiments. An identical phrase can be played with grace, or anger, or love, or animosity, or nonchalance. The player should "feel" these different moods before hoping to render the proper one, either proposed by the composer or by ones self-artistry. To get back to a more academic way of improving phrasing, I usually advocate, to the beginner, the simple expedient (again following nature's precepts) of increasing the tone while the melody goes up, to the highest or most important note and decreasing when the music comes down to its natural ending. This system will make one interpret music correctly nine times out of ten, as the exceptions to this rule are usually marked by the composer. Good taste should also be greatly relied on while phrasing. A phrase can be interpreted in various different ways, sometimes all acceptable, but there is always one that is better than the others, although no set standard really exists.

### Practice

To acquire proficiency in playing any instrument, one has to know how to practice which in turn leads to full freedom of action in every phase of playing. The great secret is to practice

## Finger Motions

slowly, either to attain perfect technique or perfect phrasing. One does not progress by leaps and bounds. Progress follows a gradual evolution of knowledge. Progress has to be built up steadily, little by little, sometimes with a feeling of regression and suddenly making a big step forward, followed usually by a standing-still period until the next wave of going forward is felt.

The pattern of progress can be compared to an oncoming tide—waves after waves move onward, seemingly with the same upsurge, but once in a while, one of the waves reaches ahead of the others, and then seems to be followed by the others, until the same motion occurs anew.

Progress always moves forward—is never still. The minute one feels that he has attained a certain level, at that precise moment one stops progressing, unless he tries to reach a higher level still, or else, regression starts and the level goes down. Perfection does not exist, but the ambition to reach it makes for unending progress and self-satisfaction.

### Practice of the Finger Motions

The practice of finger motions is conducted in two very different ways. First: when practicing to obtain a clean, fast and impeccable technique, one has to play finger exercises or scales at a slow pace, with a snapping clean cut motion (one motion for each note) of the fingers, in a very mechanical way, so as to train the fingers to move methodically one after the other. Then the speed should be raised gradually until fast tempo is reached. Always practice the speed "below" the one you are aiming for. Remember that practicing is not playing. One can "practice" well for half an hour and waste his time "playing" for six hours. Playing is the result of practicing.

Second: the practice to attain good finger motion in slow playing (phrasing) consists of training the fingers to come down on the instrument without any hammering effect, by raising the fingers very high above the holes and bringing them down "slowly" until the holes are covered or the keys pushed down. At the same time the tone should be well sustained, so as to produce an even slur, a curve from one note to another. Practice one finger at a time (C to B, B to A, etc.) in the high register and then two or three

fingers together—High C to A, B to G, A to F, etc.:



Then the hardest slurring exercise on the clarinet (Rose 40 Studies No. 1).



When one can master perfectly these exercises, one can expect to slur anything without effort thereafter. One of the tricks of reaching a high note slurring from a lower note, is to increase the low note in volume and then to move to the high note slowly raising the fingers, and playing the high note a little less *forte*.



By relaxing the embouchure on the low note, one is thus able to press the upper note without closing up or over-squeezing the reed. A little practice will accustom anyone to doing this perfectly. When good slurring at a faster tempo is required, I recommend moving the fingers "toward" the next note so as to be on one of the keys when the note is due. I call this, anticipated action of the fingers, to get a perfect legato at a medium speed. (Recommended: Rose 40 Studies No. 9). Fingers should move in this fashion with a wavy motion not an angular motion.

### Fingerings

I will not try here to describe every conceivable fingering that occurs in playing clarinet, but I will forewarn some teachers, who are not careful enough to insist on making beginners employ correct fingerings, that they simply will create a lot of inconvenience later on for their students as far as clean playing and fast technique is concerned.

I will also remind teachers that perseverance and persistence are the primordial requirement in teaching. A pupil will learn one thing correctly to forget it immediately when encountering another obstacle in the hard path of learning. That is why, be it slurring, staccato, or phrasing, the pupil must be drilled until he does things naturally, by himself, and not because he is told or reminded of it.

### Cadenzas

Cadenzas are usually played too fast. A rushed cadenza always sounds as though the player wanted to get rid of it as quickly as possible, instead of giving the listener a feeling of poise and recitation. Every run of a cadenza must start with a slight rubato then accelerando, and if aiming at a  $\text{♩}$  should get there with a slight ritenuto. The small tipped notes of a cadenza, written in different values, give the player a clue to its interpretation and although not separated by bar lines (to permit more freedom of meaning) these different values should be respected. Example: a chromatic run written in thirty-second notes will be played very fast. The same run written in eighth notes will be played at a slow pace by comparison to thirty-second notes and so on.

### How to Choose an Instrument

When selecting a new clarinet, one should look for an instrument with a resilient quality of tone—that is a flexible tone, a tone that will allow the player to do with ease the exercise that I recommend in the chapter on phrasing (flexibility). One should also be able to play a high C starting *mf* to a *fff*, without feeling that the intonation of that note is getting flat. Then, in reverse, play an E (first line) from *f* to *ppp* without feeling that the tone is getting sharper. An instrument that has a too "easy" sounding tone is liable to become, with a few years of service, too easy blowing, thus hampering the

ability of phrasing. A new instrument, giving a slight resistance, will turn out just right within a year or two of usage. The second great requirement in choosing a new clarinet is to check carefully on the basic intonation. The scale must be perfect and even. Be sure when trying a new clarinet that you do not play as you are used to on the one you are accustomed to playing. Play "neutral" i.e. without any note-humoring or overpinching some notes and relaxing others. Be sure that the mouthpiece you are using is of the correct pitch. Some mouthpieces tune well only on a certain make of instrument, and will sharpen or flatten other makes, or play them out of tune.

### How to Select a Mouthpiece

One of the worst mistakes that reed players make is in fooling around with a hundred different lays of mouthpieces to fit a hundred different embouchures. In my long years of experience as a teacher, I have come to the logical conclusion that *any* embouchure, if the player has a correct position (see first chapter) can be fitted with *one* lay and opening of mouthpiece and that is the medium opening mouthpiece that *anybody* can use—beginners, advanced or professional players. I have always objected to catering to a bad or defective embouchure by using a mouthpiece suited to it. It is always better for the student (or indeed the artist) to correct his defects rather than nurse them. I have found this method paying large dividends in the long run, and I have been rewarded by continuous success in practicing this method. If a certified, good universal mouthpiece does not satisfy a clarinetist, my first remark is "what is wrong with the embouchure?"

#### Reeds

(See Chapter 4)

#### Ligature

The question of the ligature has been, until recently, sadly neglected by clarinet and saxophone players. Since the time when a piece of string tied around the mouthpiece, was replaced by the present day metal ligature, few musicians have understood that the sides of the reed are crushed against the mouthpiece, which in practice gives a curved shape to the reed instead of its lying *absolutely* flat on the lay of the mouthpiece. Obviously, the reed *has* to be held tightly in its very *center*, *longitudinally*, in order to allow perfect and total freedom of vibration.



# CHAPTER 3

## Method of Staccato

This chapter was written at the request of many professionals, clarinet students, and teachers, who realize the great need of definite rules for acquiring a correct way of playing staccato.

During my twenty-five years experience as a teacher, I have employed this system, which I devised myself, without having ever met with a single failure, as long as the students have the patience to follow instructions faithfully and will practice slowly.

All my pupils, many of whom occupy top positions in American Symphony Orchestras, possess a perfect staccato and an impeccable articulation.

May I add that this system of finger synchronization can be applied to all wind instruments.

I have taught it successfully to flutists, oboists, French horn and trumpet players. The method will prove invaluable to all wood wind and brass teachers.

Perfect staccato is simple if instructions are carefully followed. Keep in mind that these instructions are based on acquiring a perfect staccato at all speeds. Learn and practice slowly what is required when playing staccato fast. It can be called: SLOW SYNCRO-MOTION STACCATO.

The first requirement in playing staccato correctly is to know how and where to hit the reed with the tongue.

The very tip of the tongue should be used to touch the part of the reed just below the extreme tip thus:



The principle of staccato is not to hit the reed with the tongue but to have the tip of the tongue *ON* the reed and move it backward and forward intermittently at different speeds as needed. Consider staccato as an interruption of legato. This will be discovered in the first exercises.

I repeat, in making staccato, the tongue moves back and forth, with the pressure of the wind always the same, as tho playing legato. The faster the interruption, the faster the staccato.

The following procedure will demonstrate fully how the system works:

First exercise:

Blow an open G—Hold it and then suddenly stop the tone by putting the tongue on the reed. Keep constant pressure of wind, although no sound comes out of the instrument. Then take your tongue *OFF* the reed. This will start tone again. Repeat same procedure several times (take breath when necessary) and continue until the tongue moves regularly.



After you have mastered this exercise proceed by trying the short staccato, using the same principle. *Do not forget that in the short staccato, the tongue is always on the reed and goes "on and off" quickly for each staccato.*



You must feel, in playing these staccato exercises, that the flow of wind, is always behind the tip of your lip in a constant pressure, EVEN when the tongue is preventing the reed from vibrating.

Routine of practice:

Repeat the above exercises for many days and keep on practicing them even after going on with further exercises. This will help you retain the basic principles of the system.

Once you have mastered the short staccato, the next step is the motion of the fingers "synchronized" with the motion of the tongue—in other words, the fingers must move in reverse motion of the tongue, thus preparing the next note to be played as quickly as possible after

each note is played. For this, play slowly the following easy 5 notes (short staccato).

Play C, move quickly to D (do not take breath) Play D, move quickly to E (do not take breath) Play E, move quickly to F and so on.

Remember that the wind pressure never relaxes, as if you played the 5 notes legato.

Move quickly to next note but do not play it until you have to, according to the written music.

The same process is used when playing articulation of 2 notes slurred, 2 notes staccato, 3 notes slurred, 3 staccato or any other combination of articulation.

IMPORTANT

In these exercises of articulations, the tongue must snap back on the reed immediately as the last slurred note is played and the finger moves to the next note, ready for short staccato.

Keep in mind that this way of playing staccato *must* be practiced very slowly thus giving the player the correct motion of tongue and fingers as occurs when playing fast. This is the slow motion description of fast staccato playing.

Notice—When a slur is followed by another slur, there should be no preparation of fingers to the next slur as in this example:



In this example, each first note of slurs is just "called", by touching the reed lightly with the tip of the tongue, without actually interrupting the flow of wind.

But if slur after slur is syncopated, then the last note of each slur is slightly shortened to allow the tongue to give a little accent on the first note of next syncopated slur.



Exercises recommended to attain perfection of staccato and articulation (can be varied infinitely).



STUDIES RECOMMENDED

- 40 Studies for Clarinet by C. Rose.
  - No. 11—Played very slowly.
  - No. 22 and 23—Playing all notes short.
- 32 Studies by C. Rose.
  - No. 4—12—20—24—26.

ACCENTS IN ARTICULATION

In playing articulation, rhythmical accents are very important, as they lead the player in performing perfectly on time with the given beat.

Here is a little diagram of how accents should be played, according to different articulations.



The accent is placed on the first note of slur, second note of slur played short, preparing fingers for next note; next staccato note or notes short. Only in the 1 and 3 is the accent given on staccato note on the beat—as usually, the first note is melodic and the other three are accompaniment. It can also be taken for granted that in articulation when the figure of one-eighth and two sixteenths occurs the eighth is played as a sixteenth and a sixteenth rest thus—



Do not forget that in playing articulation, the *speed* of the *tempo* determines the shortness of the staccato—for example, in a certain staccato passage played *presto*, the staccato will be very short. If the same passage is played at a moderate tempo, the staccato will be played longer and in this case, the shortening of the last note of the slur preceding the staccato note becomes less short, as there is more time to prepare the next staccato note.

In fact, as I said before, the speed of the playing determines the shortness of the last note of the slur, and of the staccato notes, to a point that in semi-staccato or legato staccato and at a slower tempo, that last note does not need to be played short any more.

HINTS ON RHYTHM—and difference of articulation according to speed of tempo.

When playing a 6/8 rhythm as




the speed of the tempo determines how such a figure should be played. For example, in a "slow" 6/8 the dotted eighth should be long, although separated from the following sixteenth thus:



In a fast tempo, then the dotted eighth becomes shorter and the sixteenth and next eighth are played short, thus:



When playing  one must feel that the sixteenth is related to the last eighth of the group and not to the dotted eighth thus:



as exemplified in Beethoven's 7th Symphony.



THERE ARE THREE KINDS OF STACCATO

(1) Short staccato (as in technique passages) at fast speed.

Example:

Beethoven's 4th Symphony.  
4th movement.



(2) Semi-short staccato (notes not dotted or eighths at slower speed).

Beethoven's 6th Symphony (Pastorale—1st movement).



(3) The long staccato in slur, as Beethoven's 7th Symphony Andante.



Where the eighths are played "detached" without stopping the slur.

Difference of interpretation of dotted eighth and sixteenth in slow tempo (phrasing) or fast tempo (technique).

When playing dotted eighth and sixteenth in phrasing (slow tempo) the stress should be put on the 16th note thus:



with a shade of a stop after playing the dotted eighth.

Playing the same passage in a fast tempo the stress must be on the dotted eighth played short as an eighth and sixteenth rest, and the sixteenth played short thus:



associating the sixteenth with the next note; actual sound.



In the same order, it must be noted that a dotted quarter and an eighth are also separated unless tied in the slur as



## The Art of Adjusting Reeds

The importance of properly adjusted reeds cannot be overemphasized. A fine reed is absolutely necessary in order to play the clarinet artistically. Because of the fact that no two clarinetists have exactly the same embouchure, and since there are so many different mouthpieces on the market, it becomes essential for the clarinetist to learn to properly adjust the reed to suit his personal needs. But, before one learns how to adjust reeds, he must have an understanding of how the reed vibrates according to the position of the mouthpiece in the mouth, and, of course, the construction of the reed.

The position of the mouthpiece in the mouth is very important. The mouthpiece should be at about a 45-degree angle. Notice in Figure 1 that the correct angle allows a greater length of vibrating reed. When the clarinet is held too high, there is a shorter length of vibrating reed. When the clarinet is held too high, there is a shorter length of vibrating reed in the mouth, and the pressure of the lips is opposite each other, requiring a harder reed. As a good rule, the upper and lower pressures on the mouthpiece should not be opposite. The upper-pressure should be near the tip of the mouthpiece, while the under-pressure should be lower on the reed.



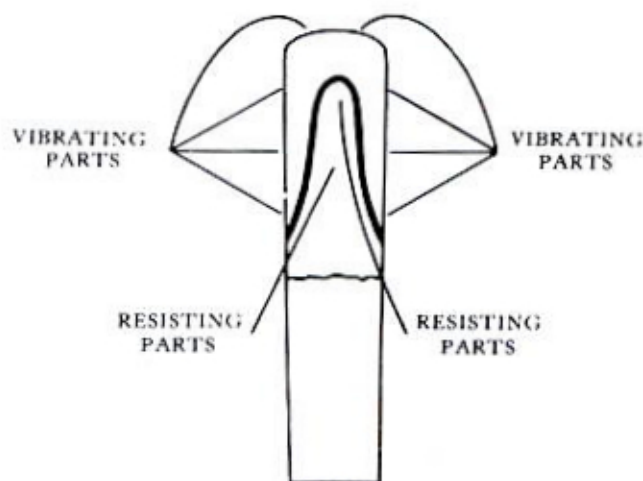
CORRECT MOUTHPIECE POSITION



INCORRECT MOUTHPIECE POSITION

### Parts of the Reed

You will be working with two parts of the reed—the vibrating and resisting parts. The vibrating parts of the reed are the tips and the sides. The tip must be soft (thin) and gradually grow stronger as it approaches the resisting part of the reed. The sides or edges of the reeds should also become gradually stronger from the top to the bottom.



THE PARTS OF THE REED

## Preparing a New Reed

The center of the reed is the resisting part and should be strong enough to withstand the pressure of the lips. A reed which is not strong enough in the center will not give the necessary resistance. Also, a reed which is too hard at the tip or on the sides will not vibrate freely. It is the balance between these two extremes which is desirable, but which is difficult to achieve in the art of fixing a reed properly.

### Preparing a New Reed for Adjusting or Playing

A new reed should be well wetted by saliva and immediately pressed hard on a piece of glass and rubbed strongly up and down by the forefinger. This closes the pores of the reed and thus prevents it from getting soaked up too quickly. A reed is made of countless little tubes that have their aperture at the surface of the cut part of the reed.

When the reed is rubbed strongly as prescribed above, the pressure of the finger closes these apertures and thus prevents the water from filling the tubes and making the reed water-soaked. A reed treated this way will last longer and have more resistance.

A new reed should not be played more than ten minutes and then should be left to dry, sometimes for a day or so. Do not try to fix a reed evenly all at once. It takes several periods of fixing to get a reed absolutely even.

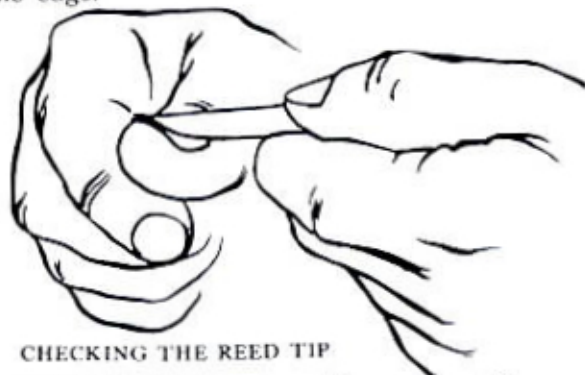
When a new reed gets too wet or has been played too long, it will lose its resistance. It will become impossible to feel its resiliency under the finger, or find out which of the sides is not even with the other.

### Importance of an Even Reed

The reed should be as even as possible in order to permit flexibility, beauty of tone, and easy performance of dynamics. A well-cut reed will be easy to adjust to one's need. A badly-cut reed will be extremely hard to adjust, if not actually impossible. When a reed is cut unevenly, the lip pressure is stronger on the heavier side of the reed, thus making the weaker side vibrate too fast and causing the reed to feel too soft. If the strong side is adjusted to match the weaker side, the reed will vibrate more equally and will actually seem stronger. The lip pressure will be more evenly distributed.

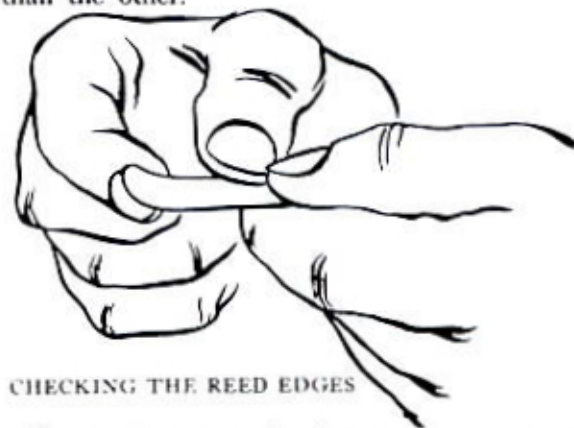
### Determining Whether a Reed is Cut Unevenly

Wet the reed thoroughly with saliva to make it resilient. Place the reed in your left hand between the thumb and index finger. Then bend the reed tip gently all around with your right thumb nail, looking in the direction of a light. Make certain that the tip is fine and even all along the edge.



CHECKING THE REED TIP

Now try the same operation on the sides, as illustrated below. First the left and then the right side, to determine if one side is stronger than the other.



CHECKING THE REED EDGES

Once a strong spot has been detected on one of the sides of the reed, it must be adjusted to match the other side. I must again emphasize the importance of playing the reed on your clarinet after each slight operation. If the reed becomes too soft after evening it up, then cut it with a reed trimmer.

### Reed Rush

The best way to scrape a reed is with the use of reed rush, or "Dutch rush," as it is often referred to. Razor blades and knives dig holes in the reed, while sandpaper scrapes too large a surface at one time. The reed rush is small and

raspy, and permits you to soften the reed at close tolerances. It is much more satisfactory than any other tool.

To prepare the rush for scraping, wet the rush thoroughly until it becomes pliable and flexible. Then cut one end neatly and flatten between fingers. Rush should be moved sideways as a file—only using the tip. Hold vertically and very gently, otherwise you may damage the tip of the reed. When rush is used on the side of the reed, greater pressure may be applied. On the lower edges, you may press very hard.

Whatever scraping is done, remember—never scrape the center of the reed. This part is not to be touched!



### Cutting and Scraping the Reed

When using a reed trimmer to clip off the tip of the reed, be sure to clip only a very small amount at a time—a hair's breadth. The same principle applies when scraping a reed. Scrape a little at a time, try the reed, take a little more off if necessary, and by way of comparison you will gradually improve the evenness of the reed.

When fixing a reed, try to determine if the reed is even on both sides at equivalent places. If you think, after feeling the resiliency of the sides or edges that the reed is too strong, say, on the left, then scrape the left side gently, and try the reed. If you find an improvement in the tone and the playing of the reed, repeat the same operation a little more. If your reed is not improved or becomes worse, you were scraping the wrong side, or the wrong place.

Following are some pointers on how to tell where to start cutting or scraping your reed.

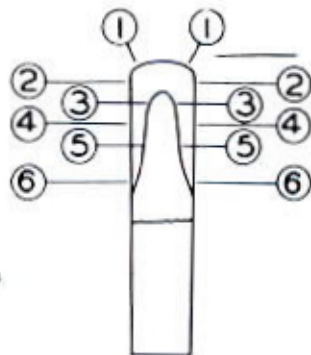
- (1) When a reed sounds good but a little too heavy, probably the lower edge is too strong on the right side.
- (2) When a reed sounds good but a little soft,

cut the tip until desired strength is obtained.

- (3) When a reed sounds good while played forte, and heavy when played soft, a reed is too strong at tip or left upper side.
- (4) When a reed whistles or squeaks, one side is too strong at the middle near the center.

Different places where a reed can be uneven --

- 1 — tip
- 2 — corners
- 4 — middle edges
- 6 — lower edges
- 3) ) sides of resisting points
- 5)



For the very meticulous clarinetist, I know the following observation will prove of invaluable help in adjusting and creating the "perfect reed." I have found that by fixing the reed just a little stronger on the left side than on the right, especially in the lower part (around numbers 5 and 6), the reed will have greater flexibility and be less likely to choke. The reason for this is that the clarinet is supported by the right thumb, causing the clarinetist to bite more on the left (unsupported side) of the reed. Thus, the reed requires more wood on the hardest pressed side. Thus, when fixing a reed that does not vibrate freely, it is safer to scrape the lower edge of the right side, and relatively dangerous to weaken the left or resisting side of the reed.

### Use of the Sandpaper File

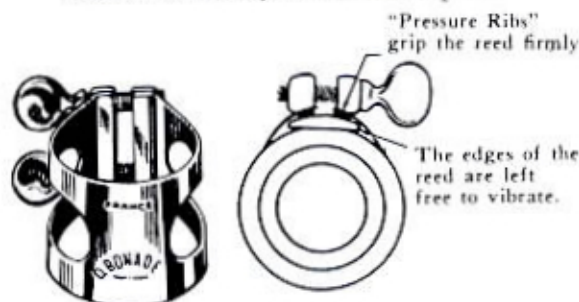
The sandpaper file is used exclusively for rounding corners of the reed after cutting so as to match evenly the tip of the mouthpiece. Sometimes, square corners of a reed make a buzz in the tone. Use sandpaper file in upper direction of the reed. Do this lightly.

A reed, therefore, will not play well if:

1. The reed is thicker on the right side.
2. The tip is too thin or too strong.
3. The lower edge is too heavy on the right side.
4. The center does not sufficiently resist lip pressure.
5. The tip is uneven.



6. The tip is too square or too round.
7. It has not been properly seasoned.
8. There are nicks, mars or cracks on surface.
9. The pores have not been properly lubricated and closed before playing.
10. The under-part is warped or not smooth.
11. Too much pressure is applied on the sides of the ligature.
12. It is not placed on the mouthpiece in the proper position.
13. The strength of the reed is not in the proper relation to the lay of the mouthpiece.



### Mouthpiece-Reed Relationship

For a fine all-around mouthpiece, I recommend a hard drill rubber rod mouthpiece with a medium opening. There are many mouthpiece materials available on the market, but I have found that a drill rubber rod mouthpiece, generally speaking, produces the finest tone, is the most durable and consistent, and can be worked to closest tolerances. I have developed a mouthpiece bearing my name which has been highly successful with many clarinetists. The Bonade Mouthpiece has only one facing—the lay specifications that I use and recommend to my students. Other fine mouthpieces available include the Vandoren Mouthpiece (the 2RV facing has been extremely well accepted), Stowell-Wells-Schneider Mouthpiece (the B-2 and B-3 facings are best for all-around playing), the Langenus Mouthpiece (created by Gustave Langenus), the Leblanc Mouthpiece (try L-1 or L-2) and the Noblet Mouthpiece (2V is most popular).

A close-lay mouthpiece is the hardest to suit with a reed as it requires a strong reed up to the near tip and then very soft at the tip. The opening, being the vibrating space, that space being small, less and heavier vibrations will be obtained. A medium lay is better suited to obtain the maximum amount of vibrations and beauty of tone, which is basic in clarinet playing.

To clarinet and saxophone players who use an embouchure as in Diagram #2, I would recommend selecting a reed which is strong up to about a quarter of an inch from the top. Then lightly scrape both edges to about the middle of the reed, and make the tip of the reed very thin. This applies especially to saxophone players, for they use an opposite pressure of the lips due to the mouthpiece being in a nearly horizontal position in their mouth.

I believe that the proper reed should have great support at the resisting parts, with a sharp decline from the top of the "heart" to the tip, being thin at the tip so as to give a much greater vibrancy to your tone quality. The vibrancy not only improves the tone and allows better articulation, but creates a much greater carrying power. My own Bonade reeds are cut in the above manner.

### Good Ligature Essential

In closing, I want to emphasize the importance of a good ligature. A bad ligature can spoil a good reed on a good mouthpiece by binding the sides of the reed and thus preventing the reed from vibrating freely. Many clarinetists never realize that their reed troubles actually stem from a poorly designed ligature. They keep looking for reeds that will compensate for the poor design of their ligature. The ligature should hold the reed secure at points right off-center of the reed, so that the edges of the reed are free to vibrate. My own Bonade ligature utilizes this principle by means of the portion of the ligature which holds the reed. These bars are the only part of the ligature which touch the reed. The sides of the reed are thus free to vibrate. Because the reed is permitted to vibrate more freely, many more reeds are playable with this new ligature. Thus the additional cost of a ligature of this type is soon offset by the savings made in reeds. Other advantages of the ligature are that from 20 to 30 per cent more tone may be produced through its use and far greater carrying power.

In conclusion, I would like to advise you not to be discouraged if your first few reeds do not turn out "perfect." There is a certain "feel" which you will quickly develop, after practice, which will allow you, too, to adjust reeds correctly, evenly and precisely to your individual needs.

