

TEXAS BANDMASTERS ASSOCIATION

INTERMEDIATE INSTRUCTION SERIES



BASSOON

**BILL HARDEN
CLINICIAN**

**51 ST ANNUAL CLINIC
SAN ANTONIO, TEXAS
1998**

FOREWORD

The primary focus of the annual Convention of the Texas Bandmasters Association is providing opportunities for professional growth for its members. Your attendance at the clinics offered in the Beginner Instruction Series which began in 1995 has encouraged the Board of Directors to continue with a second series of clinics which addresses the needs and instructional strategies for second-year band students. Our clinicians are chosen from the ranks of superior music educators in our state, and they represent a wide diversity in geographic location as well as school size and setting.

This year clinics are scheduled for bassoon, low clarinet, saxophone, trombone, euphonium, tuba, and membrane percussion. Each person attending will receive a companion booklet in which you will find suggested materials and pedagogical strategies which our clinicians are so generous to share with us.

We appreciate the extra effort of the clinicians who prepared these clinics. We also acknowledge Jim Hagood, TBA Past President, whose initiative got the series started, and both Bob Brandenberger and Mike Olson who continued to move forward with the project.

This series is respectfully dedicated to the many band directors, both past and present, who have worked so hard to make our students' experience in band music such a rewarding one.

Bob Parsons, President, Texas Bandmasters Association

BILL HARDEN

Bill Harden, a native of Corpus Christi, received a Bachelors Degree in Music Education from Hardin-Simmons University in 1986. He continued his education at the University of Cincinnati College-Conservatory of Music, earning a Master's Degree in Bassoon in 1988. He began teaching in August 1988 as the assistant band director at Odessa High School, and moved to his present position as band director at Bowie Junior High in 1990. He currently plays second bassoon in the Midland-Odessa Symphony.

THE BASSOON

“I have no idea about teaching the bassoon!” If I had a dime for every time I heard that phrase! Actually, I probably would not be rich, but I would have a lot of change! So many band directors are afraid of the double reed instruments, when in actuality, they are really not much different from other instruments. Many of the ideas I present here for developing tone and technique have come from other teachers on different instruments. There are several techniques peculiar to the bassoon, however, and I have tried to include an in-depth look at the processes involved in developing these skills. Included with this packet, you will find a list of the bassoon players and teachers in Texas who can provide further assistance to you and your students. The first step to developing the intermediate player is to establish a set of goals. Below are the goals I feel should be addressed at this level.

GOALS FOR THE INTERMEDIATE BASSOON PLAYER

1. Develop a centered, characteristic tone in all registers of the bassoon.
2. Recognize good intonation, and be able to **identify** and correct tuning problems as they arise.
3. Be able to use vibrato to enhance tone quality and musical expression.
4. Be able to play scales in all registers of the instrument,
5. Be able to apply the technique of flicking to produce smooth technical playing.
6. Be able to make minor adjustments to improve reed performance.

TONE

Students beginning their second year of playing should already have a basic understanding of tone and tone production. However, even a professional musician must strive constantly to maintain and enhance this most important element of playing a musical instrument. When a musician quits worrying about tone, it is time for him to quit playing!

I. Elements of good tone

A. WIND! (Must have good breath support.)

1. Student must learn to inhale the maximum amount of air possible.
2. Lack of proper support will cause flabby, uncontrolled tone.
3. Air must move fast, and must not be hindered by tight throat or chest.

B. Openness in throat

C. Embouchure

1. Lips should surround the reed to prevent air escaping.
 - a. Round embouchure
 - b. No biting, or “chomping”
2. If too tight, the sound will be small and sharp.

D. Posture

1. Sit up straight in chair with feet flat.
2. Lean into the horn slightly
3. Seat strap should be towards the front of the chair for balance.
 - a. Strap should bear the weight of the instrument.
 - b. Poor strap position will cause weight to shift to hands.
 - c. If the strap is high or low, head position will be affected.
4. The **bocal** and reed should go straight into the mouth.
 - a. Even slight angles will cause the student to raise or lower the head and create problems with the throat and embouchure.
 - b. Bent **bocals** will create special problems with this position.

II. Tone building

A. Good breath support

1. Exercise 1

- a. Sit up straight and place hands on either side of waist.
- b. Inhale slowly over four counts
 - i. Hands should feel the waistline expand.
 - ii. There should be no unnatural movement of the shoulders.
- c. Exhale air with a hissing sound over four counts.
 - i. Hands should feel the contraction of the waist.
 - ii. Again, watch for excess movement of shoulders or head.

2. Exercise 2

- a. From a standing position, bend over at the waist and reach for the floor.
- b. Inhale slowly over four counts, feeling the stomach movement.
- c. Exhale slowly over four counts.

3. Exercise 3

- a. Repeat steps in exercise 1 while lying on the floor.
- b. Place a book on the stomach and work to raise it with the breath
4. There are many other exercises to use. Most important thing is to use them!

B. Throat position

1. A closed throat produces a closed sound.
2. Work diligently to keep mouth cavity as open as possible.
 - a. Mouth works as resonating chamber.
 - b. The bigger the chamber, **the better** the sound!
3. Exercise
 - a. Have student finger a fourth line F while opening throat to make it sound E.
 - b. Increase the intensity of the air to move note up to pitch.
 - c. Watch carefully to prevent embouchure from tightening to produce sound.
 - d. Exercise can be repeated on any note in the middle register.
4. While playing in the upper register, think “EEE” to prevent flabby sound.

III. Developing Intonation.

A. Must begin developing the ear from the beginning.

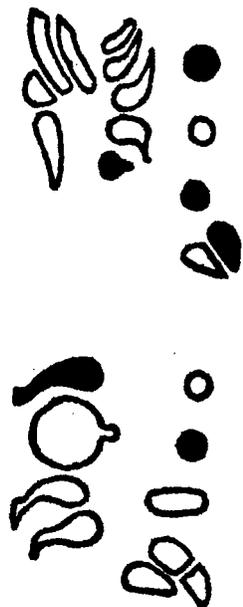
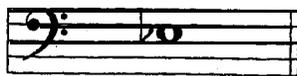
1. Work with a tuner that sounds a pitch.
2. Student must use ear to match pitch of a machine, or of another player.
 - a. Work with at least one other person.
 - b. One student plays while watching a tuning dial, the other plays and matches.
3. Stress the importance of a good tone in developing good intonation!

B. Learn the notes of the horn that are inherently problems.

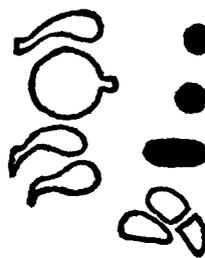
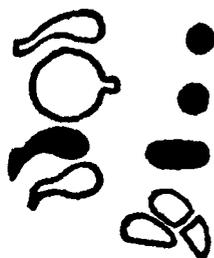
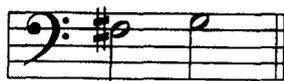
1. Low register notes tend to be sharp.
 - a. Drop the jaw.
 - b. Think “AHH”.
 - c. Have them think of taking the bottom lip off of the reed.



2. Third space E-flat tends to be unstable.
 - a. Use extra fingers to help.
 - b. Always use E-flat resonance key.



3. Fourth line/space F-sharp/G are generally sharp notes.
 - a. Always use the E-flat resonance key.
 - b. Drop jaw and keep throat open.



4. C and D above the staff are often flat.
 - a. Use more air support from stomach.
 - b. Increase lip pressure on the reed. NOT TOO MUCH!



5. Notes in the higher register are very unstable.
 - a. Generally very sharp.
 1. Tendency to bite the reed.
 2. Make sure air support is strong.
 - b. Keep jaw open.
 - c. E-flat resonance should be used from E up to B-flat and above.



EQUIPMENT

I. The instrument.

- A. Get the best instrument available in your price range.
 - 1. Fox Model IV's work very well for us.
 - 2. Fox Renard Model is also very consistent.
 - 3. For the more advanced player, Fox 20 1 or 60 1.
- B. Wood or polypropylene (plastic)?
 - 1. Either one works very well, but polypropylene is harder to break!
 - 2. Junior high students tend to bump their instrument.
 - 3. In some climates, wooden instruments tend to change with the weather.
 - 4. If wooden, stress the importance of care.

II. Bocals

- A. Make a TREMENDOUS difference in a horn.
- B. Can make a mediocre instrument sound pretty good.
- C. Brands.
 - 1. For the money, Fox has a very good product.
 - 2. Heckel is the top of the line!
 - a. Well worth the money, especially for an outstanding player.
 - b. If matched to the horn, helps to stabilize tone and scale.
 - 3. Other brands
 - a. Puchner
 - b. Yamaha
- D. How to order.
 - 1. Try to have several sent at one time.
 - 2. If available, have a professional try each bocal with the intended horn.
 - 3. If unavailable, have the student play each of the **bocals** and you listen.
 - a. Which has the best overall tone?
 - b. How is the scale of each bocal?
 - c. Which provides the best response?
- E. Sizes
 - 1. The bigger the number, the longer the bocal.
 - a. Labeled from 0 to 3.
 - b. Most players will use a 1, 2, or 3.
 - 1. With students, I find the 3 helps keep the pitch down.
 - 2. Stronger players can usually play well with a 2.
 - c. Number on bocal changes pitch by 1/4 tone.
 - 2. Letter designations on a Heckel bocal represent type of metal alloy, thickness, and bore size.
 - a. C - Normal
 - b. CE - favors the middle register
 - c. CV - lowers pitch in upper register
 - d. B - favors the high register
 - e. D - thin walls, more responsive

- f. BD ▪ very flexible pitch
 - g. BDV ▪ light speaking
 - h. ‘D’ bocals are made with thinner metal, and require careful handling. I would not suggest for young students.
3. Letter designations for Fox bocals.
- a. C ▪ stresses resonance and clarity of sound.
 - b. CV ▪ reduced resistance.
 - c. CVX ▪ More open tone quality.
 - 1. Fits design of long and short bore bassoons.
 - 2. Solid sound and projects well.
 - d. CVC ▪ Provides for a warmer and heavier tone than CVX.
 - 1. More resistance in the upper register.
 - 2. Yields more fullness in middle and lower register.
4. Nickel plating vs. Silver plating
- a. Nickel brightens and increases resonance and adds projection.
 - b. Silver darkens and softens the tone.

VIBRATO

Vibrato. A slight fluctuation of pitch used by performers to enrich or intensify the sound.
(The New Harvard Dictionary of Music)

I. Types of vibrato.

A. Diaphragm vibrato.

1. Pitch fluctuation created by pulsing with the diaphragm muscles.
2. Make sure throat is not moving to create pulse.
3. This is the most common vibrato for the bassoon.

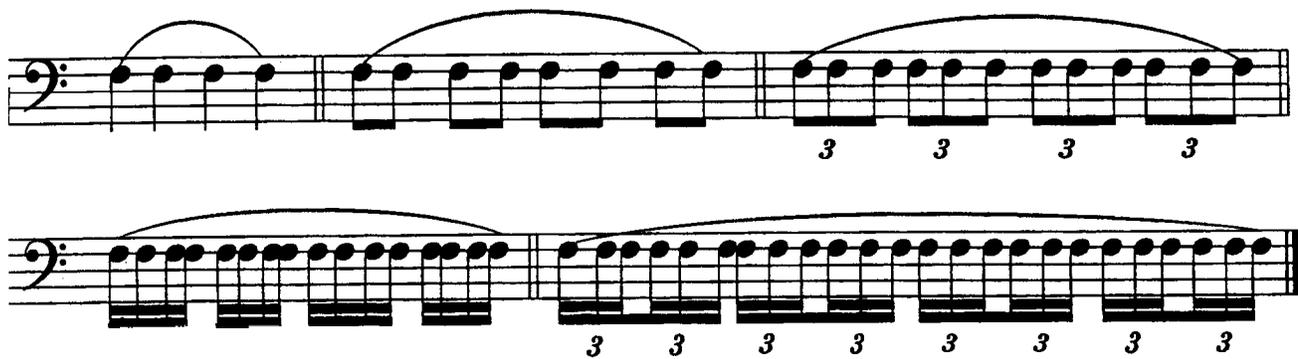
B. Jaw vibrato.

1. Pitch fluctuation created by moving the jaw.
2. Very easy for students to distort the sound.
3. Also creates problems with closing the throat.
4. Not really a good vibrato for the bassoon.

II. Teaching methods

A. Students first must learn to create the pulse with the stomach.

1. Play whole note with one pulse per beat.
2. Play whole note with two pulses per beat.
3. Play whole note with three pulses per beat.
4. Play whole note with four pulses per beat.
5. Play whole note with six pulses per beat.



B. Watch students carefully to make sure the jaw and throat are not moving.

C. The “train”

1. Helps students learn to vary the speed of the vibrato.
2. Using long tones.
 - a. Use hand to show students where to pulse.
 - b. Start with a very slow pulse.
 - c. Gradually increase the speed of the pulse in the middle of the note.
 - d. Slow the pulse again at the end of the note.
 - e. A crescendo and decrescendo can be included with the change in pulse.

3. Practice vibrato by playing a one octave C scale, starting from the top and going down.
- Start **from** the top each time, and add a note to the scale.
 - Direct the pulse on the last note.
 - Use a slow to a fast pulse, and then slow down again.

The image shows two staves of musical notation for a descending one-octave C scale exercise. The first staff shows the scale starting from C4 (middle C) and descending to C3. The second staff shows the scale starting from C3 and descending to C2. Asterisks are placed above the final note of each scale run, and a pulse symbol (a semi-circle with a dot) is placed above the final note of each scale run.

* - Play this note using the "train".

TECHNIQUE

Developing good technique for a bassoon player is very similar to developing skills on other instruments. However, there are some things which are specialized to the bassoon, such as the half hole and flicking. In all cases, practice is the **ONLY** thing that will help students improve!

I. Hand position

- A. Body of the horn should be between the last two joints of the left hand index finger. (Should not be gripped!)
- B. All fingers should be held close to the holes.
 1. Find point closest to hole where tone is not affected.
 2. When changing notes, work to move fingers as little as possible
- C. Fingers curved to holes.
 1. Play with tips of fingers.
 2. Pinkies should rest on the common keys.
 - a. Right pinkie on F key.
 - b. **Left** pinkie on E-flat resonance.
 3. Thumbs should rest on common keys.
 - a. Right thumb should rest on low E key. (Pancake key)
 - b. Left thumb should rest on whisper key.
 - c. Watch right thumb carefully; should not rest on body of horn.
- D. Keep fingers as relaxed as possible.

II. Developing technical skills.

A. Scales

1. All major for **full** range.
 - a. B-flat - 3 octaves
 - b. All others at least 2 octaves
2. Minor scales (at least in the natural form)
3. Chromatic scale - 3 octaves
4. Scales in 3rds
5. Alter rhythm patterns and articulations.

B. Etudes

1. Julius Weissenborn - **Practical Method for Bassoon** (The "Bible") [All levels]
2. Ludwig Milde - **Twenty-Five Studies in All Keys** [Med to Hard] and **Concert Studies** [Hard]
3. Anton Slama - **Sixty-Six Studies** [Med to Hard]
4. Eugene Jancourt - **Bassoon Studies** [Easy to Hard]

C. Practice!

1. Encourage daily practice according to an organized plan.
 - a. Warm-up with long tone scales or exercises.
 - b. Play through scales.
 1. Use a different articulation each day.
 2. Play at least six scales each day. Alternate each day.
 3. Chromatic scale each day.
 - c. Sightread **from** a book such as the Weissenborn or Jancourt.
 - d. Work on etude(s) for technical development.
 1. Begin at slow tempo with a metronome.
 2. Work through in phrases.
 3. Break down harder **technical** passages and work in different rhythms
- (Example)



- e. Work on music for band class.
 1. Music for ensemble performance.
 2. Solo/Ensemble for, Solo and Ensemble Performance
2. Students should be encouraged to work on etudes and scales, not just on the band music and solo and ensemble material.
3. Practice period should be at least 45 minutes to one hour each day.
4. Once all parts have been worked out, play through entire etude slowly.
5. When consistent with notes at slower tempo, move up gradually to performance tempo.
6. Stress rhythmic stability from the beginning.

III. Fingering Complexities

A. Left thumb

1. Large number of keys - keep relaxed
2. The Weissenborn Method contains great exercises for technique.
 - a. Section X is excellent for D-flat.
 - b. Section XVII will help the low register thumb.
 - c. Section XXV works on the high register thumb.

B. Right thumb

1. Not as busy as the left!
2. Very important that thumb be kept over Pancake Key.
 - a. Allows quick movement to either B-flat key or F-sharp key.
 - b. Prevents tension in hand from position on body of horn.
 - c. Watch carefully, thumb will gravitate to position on horn above B-flat key.

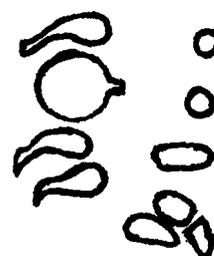
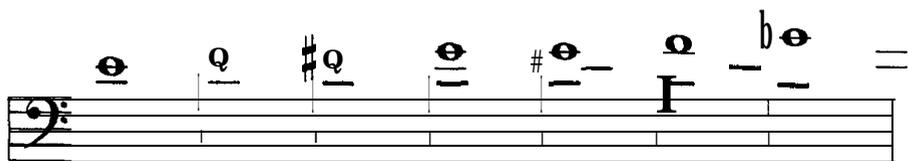
3. Hand rest (“crutch”) or no hand rest?
 - a. Depends on the student.
 - b. For smaller students, this rest is very important to help them control the size of the horn.
 - c. As students grow, the rest may not be as important.
 - d. It is NOT to be gripped!
4. Section XII and XIII (Weissenborn) will help work the F-sharp key.

C. Left pinkie

1. Should rest on the E-flat key.
2. Use E-flat key to help pitch and tone on E-flat and G.



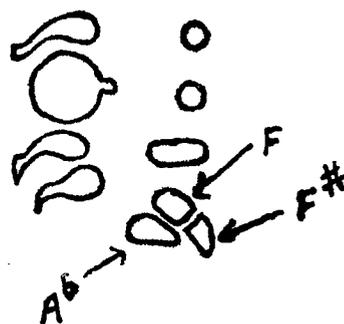
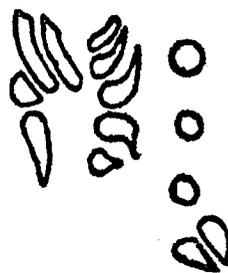
3. Add E-flat key for high register notes from E and up.



4. Should practice moving from E-flat to D-flat with a sliding motion.

D. Right pinkie

1. Should rest on the F key.
2. Work on sliding motion to move down to A-flat.
3. Students may need to move hand forward to reach the F-sharp key.
 - a. Important for students to learn both fingerings for F-sharp.
 - b. On low F-sharp, it is not necessary to keep pinkie down on F key.

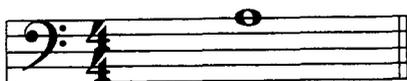


FLICKING

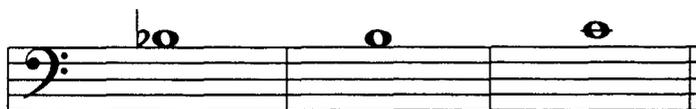
The art of flicking is something that all bassoon players must learn if they are to become good players. Because of the nature of the instrument, and the many variables involved (ie., instrument quality, **bocal**, reeds, weather, etc.), making a smooth slur up to top-line A and above is nearly impossible without this essential technique. Flicking works by creating a vent in the upper part of the tenor joint. The extra opening helps to clear up the beginning of **each** of the notes. While it does seem to be a more “advanced” technique, it should be taught from the very beginning. Practice makes perfect!

I. Flicking involves the rapid opening and closing of specific thumb keys

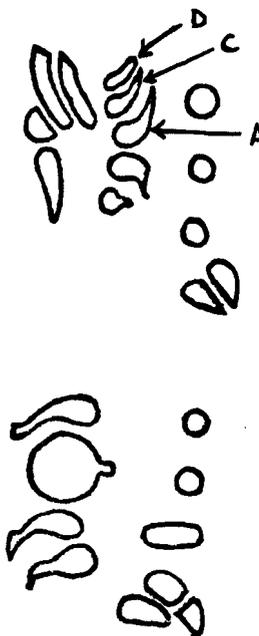
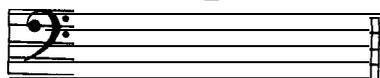
A. Fourth line A; use the high A key (see diagram)



B. Bb, B and C above the staff; use high C



C. D above the staff; use the high D



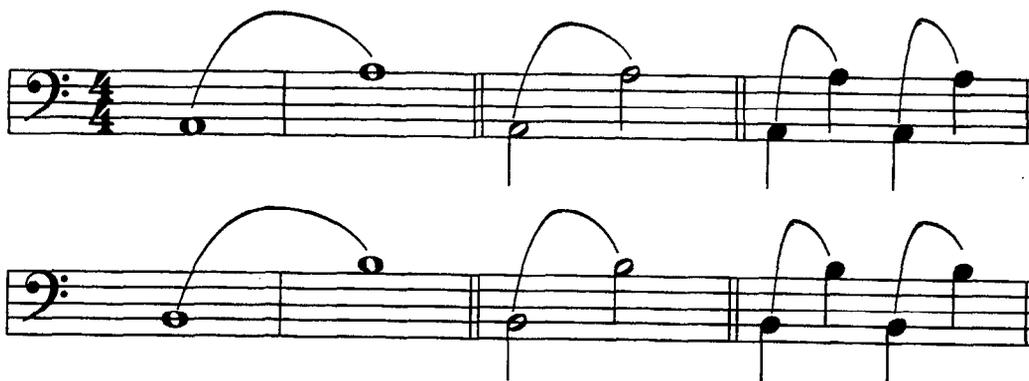
II. How to Flick

- After the initial note has started, remove thumb from the whisper key and move;
- Place thumb immediately above the key to be flicked.
- At exactly the moment you wish to change notes, quickly depress the thumb key and release it again.
- The key does not need to be held open, and may create an airy tone if is held too long.
- Be sure to use different thumb keys for the different notes.
 - High A key is almost always used to flick A.
 - You may experiment with notes above B-flat. Sometimes the D key works as well, or better, than the C key, and is easier for the student to find.

III. How to Teach Flicking

- In the early stages, students should look down their nose to watch for thumb placement.
- Once established, they must learn to feel the keys and placement.
- Start teaching using octaves: A to A, B-flat to B-flat, etc. (Example 1)
 - Hold note for 4 counts.
 - On beat 3, remove thumb from whisper key and move to flick key.

3. As note changes on beat 1, quickly depress the key using a fast, upward motion with the tumb.
4. Repeat process using half notes, moving thumb on beat 2.
5. Repeat process using quarter notes, moving thumb on the up-beat.
6. Finally, use quarter notes and move the thumb immediately before the slur occurs.



EXAMPLE 1

- D. Once pattern is established, use other exercises to help flick from other notes.
1. Play quarter note scales, returning to the tonic note between each note.
(Example 2)



◇ = Flick these notes.

EXAMPLE 2

2. Section XV, XVIII-XX in the Weissenborn Practical Method for Bassoon has excellent exercises to develop this technique.

IV. When to Flick

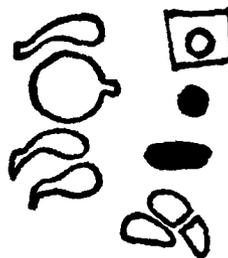
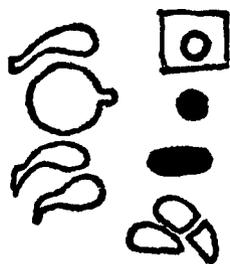
- A. Flicking should be used **WHENEVER** there is a slur up to A, B-flat, B, C or D at the top of the **staff**.
- B. In some cases, it is easier to get fourth line A to speak without a growl by flicking the beginning of the note, even when not slurring..
- C. B-flat, B, and C can also be flicked all the time.
- D. Students should mark notes to be flicked.
- E. Flick should be used even at fast tempos.

V. Other venting techniques

A. E-flat and E above the **staff** can also be vented.

1. When slurring to the note, leave off the first finger of the right hand.
2. After note is established, finger can be depressed.

B. Slurring down to A, B-flat, B, C and D



E^b

E

REEDS

ARGH! That is the best word to describe this headache! This one little piece of wood can wreak havoc on a bassoon players tone, technique, and self-confidence! While there is no easy solution, every bassoon player **MUST** have a reed in order to play, so it is something that **MUST** be addressed.

I. What reeds are best?

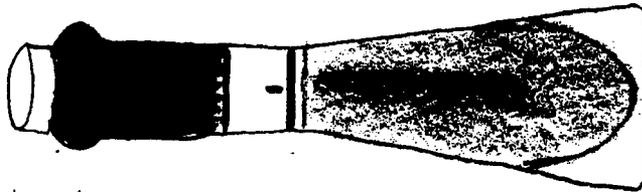
- A. Professionally made reeds are superior.
 - 1. Hand made reeds tend to be more balanced.
 - 2. If made locally, reeds will be made to fit the climate.
 - 3. A private teacher can make adjustments during lessons on a regular basis.
- B. Store bought reeds can be sufficient with work.
 - 1. Jones reeds have been the most consistent for my students.
 - 2. I suggest medium soft reeds for my students.
 - 3. Medium reeds will work for more advanced players.

II. What to look for in a store bought reed?

- A. Tip should be balanced.
 - 1. Tip should be open evenly across the entire tip.
 - 2. Sides of tip should not be bent.
 - 3. The very tip should not be too thick.
 - 4. The tip should be open approximately 1/16".



- B. When held to a light, you should be able to see a thumbnail shape behind the tip.



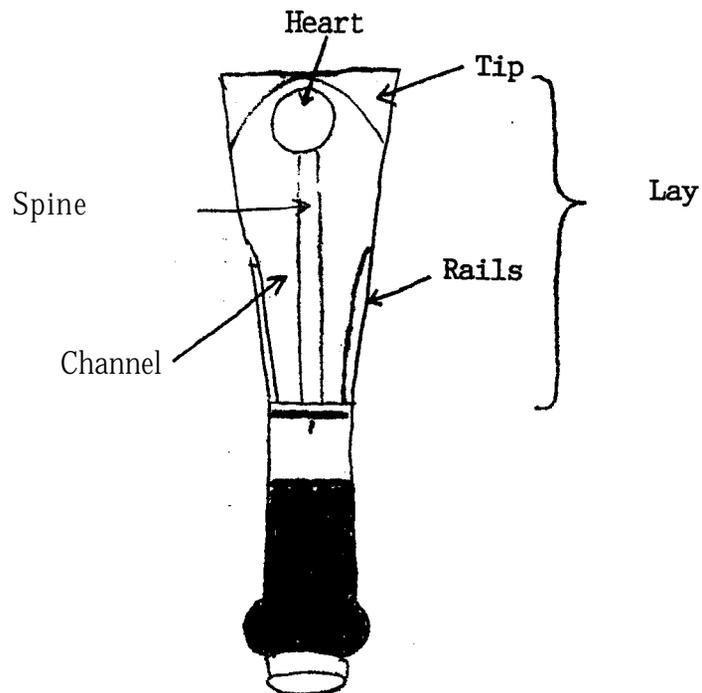
III. Reed adjustments.

- A. Most minor adjustments can be made with sand paper rather than with a knife.
 - 1. Always use a mandrel to hold the reed **while** making adjustments.
 - 2. It is **VERY** important that you insert a plaque in the reed before adjusting.
- B. Basic reed tools for minor adjustments.
 - 1. Holding mandrel
 - 2. Plaque
 - 3. Fine sandpaper
 - 4. Reed knife (I prefer double hollow ground.)
 - 5. Small file
 - a. I use a spark plug file for minor work.

- b. A small round file is useful to smooth inside the butt of the reed.
- 6. Reamer
- C. Before scraping on the blade, try adjusting reed using the wires.
 - 1. Squeezing the first wire from the top and bottom will close the tip.
 - a. Less resistance; easier to blow.
 - b. Thinner sound.
 - 2. Squeezing the first wire from the sides will open the tip.
 - a. More resistance; harder to blow.
 - b. Bigger sound.
 - 3. Squeezing the second wire from the sides will close the tip.
 - a. Less resistance.
 - b. Less heavy in the higher register.
 - 4. Squeezing the second wire from the top and bottom will open the tip.
 - a. More resistance.
 - b. Should help darken the sound.
- D. Basic scraping adjustments.
 - 1. Reed too hard.
 - a. Too much wood.
 - b. Try adjusting wires.
 - c. Scrape the tip and the lay.
 - 2. Reed too soft.
 - a. Cane is too soft or tip is too closed.
 - b. Open tip of reed.
 - c. Cut a little off the tip.
 - d. May need to sand entire reed after clipping.
 - 3. Reed does not respond to tonguing in low register.
 - a. Open the tip at the first wire.
 - b. Remove some of back part of lay.
 - c. Very slight scraping in the heart.
 - 4. Reed does not respond to tonguing in the high register.
 - a. Close the tip at the first wire.
 - b. Thin just the tip of the reed.
 - 5. Reed plays flat.
 - a. If response is good, try a longer bocal.
 - b. Ream the tube to fit **further** on the bocal.
 - c. Cut a little off the tip.
 - d. May need to thin the tip after clipping.
 - 6. Poor tone. quality.
 - a. Dark tone results from an open tip and thick reed.
 - b. Thin or reedy tone from a closed tip and thin tip and lay.
 - c. If tone is thin, can be darkened by thinning the back of the reed.

E. More information about reeds and reed adjustment,

1. Christlieb, Don. Bassoon Reedmaking. Audio visual presentation. **Christlieb Products**.
2. Jones, Wendal. Bassoon Reedmaking and Adjusting. Video presentation: VHS Format. Jones Double Reed Products.
3. Pence, Homer. The Selmer.
4. Popkin, Mark and Glickman, Loren. Bassoon Reedmaking and Bassoon Maintenance and Repair. The Instrumentalist.
5. Spencer, William. The Art of Bassoon Playing. Summy Birchard.
6. Wait, Christopher. Bassoon Reedmaking. McGinnis and Marx.
7. <http://www.canit.se/~chrisdav> (Christian Davidson, Stockholm Symphony)



APPENDIX A
BASSOON TEACHERS IN TEXAS

The following is a list of the professional bassoon players and teachers in Texas who are members of the International Double Reed Society. Many of them may be available to give you advice, or to provide private lessons for your students.

Sue Schrier Bancroft	9 12 1 David Fort Road	Argyle, TX 76226-9529
Marjorie P. Bartz	5706 Ensign Drive West	Ft. Worth, TX 76119-7003
Donna Bogan	RR 4 Box 103-EE	Alice, TX 78332-9804
Tina Carpenter	tina.carpenter@wtamu.edu	Canyon, TX
Marilyn A. Chappell	1413 1 Stokesmount	Houston, TX 77077-1424
Janet Harper Cutting	4042 Panama St	Pasadena, TX 77504-3534
Willard Elliot	673 1 Trail Cliff Way	Ft. Worth, TX 76132-3012
Peter Grenier	572 1 Brookstown Dr	Dallas, TX 7523 0-26 15
Billy Ham	304 Bob White Way	Sanger, TX 76266
Bill Harden	63 19 Alta Vista	Odessa, TX 79762
David Huber	2100 Grayson Dr #1712	Grapevine, TX 7605 1
Kristin Wolfe Jensen	5929 Back Bay Lane	Austin, TX 7873 9- 1700
Michael Johnson	82 15 Lamount Dr	Amarillo, TX 79 11 0-46 17
Kathy Kendle	1911 Rogers	Amarillo, TX 79 106
Sharon Kuster	709 Rittiman Rd	San Antonio, TX 78209-5535
William Lewis	6503 Starstreak Dr	Austin, TX 78745-4437
Carole Lyons	1600 N Yale Blvd	Richardson, TX 75081-2121
Juliet Markovich	16622 La Avenida	Houston, TX 77062-5604
Richard Meek	Box 42033 Music Dept, Texas Tech Univ	Lubbock, TX 79409-2033
Kenton Moore	4905 Brooks Dr	Waco, TX 76710-1201
Ralph William Morgan	1828 Estrada Parkway #2083	Irving, TX 75061
Ron Noble	9227 Johnny Reb	San Antonio, TX 78240-2860
Joseph Polak	13518 Beltway	San Antonio, TX 78217- 1703
Kathleen Reynolds	2128 Pembroke Pl	Denton, TX 76205-8208
James Roberson, Jr.	22045 Wickersharn Dr	Porter, TX 77365
Wilfred Roberts	405 Meadowcrest	Richardson, TX 75080-26 16
Dr. Richard Rodean	22 12 Burning Tree Ln	Denton, TX 76201-1411
Janet Worth Schmidt	401 Neu Rd	Victoria, TX 77904- 1324
Dara Smith	5803 Avenue G	Austin, TX 78752
Steven Spencer	7777 Greenbriar Dr #2062	Houston, TX 77030-453 1
Dr. John Stinespring	9401 Canton Ave	Lubbock, TX 79423-42 16
Hermann Vogelstein	43 00 Amherst	Dallas, TX 75225-6905
Scott Walzel	43 14 Southrest Rd	Dallas, TX 75229-63 58
Glenn West	265 Hardee Rd	Fort Sam Houston, TX 78234-1 144
Donald Wilson	16 17 Fannin #2520	Houston, TX 77002-7657

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På Svenska,Tack!

Reed Adjusting

by Christian Davidsson

You **can** spend a lot of time scraping and adjusting reeds with no or only minimum results. You can also spend minimum time with maximum results. Then, of course, you have to know where to scrape or adjust etc. But the most important thing is that you **have** a methodical approach so that you have an overview while paying attention to what you are doing, thereby learning from your mistakes and developing your knowledge and your skills in order to have the reeds the way you want them.

Diagnosis. First the reed you are about to adjust needs a diagnosis. It is not enough that you discard the reed just thinking it is bad, because the most impossible reed can have a happy ending and vice versa. OK, the reed doesn't feel good, but what is it about it that doesn't feel good? It could be one or more things and sometimes it could just be a big mess. If it is only e.g. the striking of a note that isn't good, you head for scraping/adjusting the area or areas that influence the striking/tonguing. But if it is more, it is time for being methodical and solve the problem bit by bit. When you play on a reed you could probably say immediately if the reed is too hard, too soft, too dark, too bright, too heavy in the high register, too heavy in the low register, too sparkling etc. You take measures to correct all of the problems in the order that they reveal themselves.

Balance. It is important to know that all things are related and that it is the balance between all corrections that will give you a better reed. To point out that if you scrape here the result will be **this** and if you scrape there the result will be that is the easy part, which I will show in the following figures. The more difficult part is to achieve a balance in the reed, which you will have either with pure luck or if you develop your feeling for how much of one thing or another you should do to your reeds. This feeling for the reeds you can only develop yourself. However, with great help from being strategic, not scraping too much at one time and the following reed-scraping figures, in time you can further develop through your own discoveries.

Scrape with your eye! See to, no matter where you scrape, that you don't get any pits or edges. It should be **soft** crossings from the areas where you adjusted to the non-adjusted ones. Balance between the middle of the reed to the edges. Too thick in the middle and too thin at the edges e.g. will give you a reed that is all-through resistant. Use your eye and see to that there is flow, harmony and smoothness through the whole reed. Get to know how different cane reacts to similar scrapings. Always let the qualities you are satisfied with remain untouched and be the reference points to the things you aren't satisfied with.

Tools. Use your imagination when it comes to tools. It is important that you have tools that you find **good** to work **with** and that suits the **different** moments. The primary tools are a mandrel, reamer, tongue, knife and pliers. The mandrel shouldn't be too long as then it hits the tongue inside the reed. The tongue should be wide enough so that the whole reed fits over it. The knife should be a reed-knife, but other knives works as well as long as it's not too big, fits well in the hand and is easy to sharpen. The pliers should be small and not too wide so that you can get to small areas. Wet-strength sandpaper with a very smooth surface (P 1000) is a good aid for getting the reed surface even and when you need to adjust the tip. A **nailfile** of metal is excellent to **e.g.** file down the edges of the reed. A knife with a **curved** edge makes it easy to scrape small areas with precision. Next you will find a fault-detecting section, thereafter a description of what happens (or could happen) when you adjust the different points. And finally you have reed-scraping **figures**. Now it remains for me to say: . . . **Good Luck!**

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In the following description I outline different ways of approaching that which your reed lacks.

This doesn't mean that you should apply all of the remedies for each point, do that only in the worst cases. The measures described are in an order that I find suitable. Alternate between the different ways to reach the desired goal as all corrections have their side **affects** and some of these side affects can be put in balance to achieve that which you wish with your reed.

If the reed is too hard: see that the middle of the reed **(15)** isn't too thick in comparison to the edges, if so scrape here. If you have too much wood in your reed, start to scrape evenly over the whole reed **(8)**. Try to discern if the e.g. high register becomes light and the low becomes heavy or vice versa. Then stop and do some further scraping on the areas you are not satisfied with. If the cane is very hard, you can as a last resort dip the whole reed **(8)** in boiling water for approx. 10 **secs**.

Too soft: If the reed is only partly soft, try to pull and tighten the first and second rings **(10)**, **(11)**. If it is not enough, pinch up the reed on both sides just behind the first ring at point **(14)**. If the reed is very soft, then cut the tip about **0,5 -1,0 mm**.

Too heavy in the low register: Scrape the back part **(3)**. You can also pinch the second ring under and over **(13)**. To a certain extent it helps to scrape the outer comers on point **(18)**, but it also makes the high notes easier. Point **(1)** makes the lows somewhat easier, but mainly makes the whole reed freer.

Too heavy in the high register: Scrape at point **(21)**. Tighten and pinch the second ring on both sides **(11)**. Scrape at point **(2)**, but if not enough even at point **(7)** and **(18)**. If required, ream out the reed or cut it.

Too dark sound: Start scraping the tip evenly all over **(9)**. See that the "heart" at point **(4)** isn't too thick compared to the surrounding areas. Just take a little at a time here, since you loose "sound" and stability but on the other hand gain more freedom and flexibility. If even more is needed, proceed to point **(7)**. Pinch both sides of the reed at the second ring **(11)**. Finally, drag the

knife in one stroke along the reed on each side of the absolute middle (19). This scraping should be done as a last resort and not too much.

Too bright or too sparkling: Scrape down the edges on both sides (6). Even at point (1) that goes further towards the middle makes the reed darker. Pinch with a pliers on both sides of the reed, behind the first ring at point (14). The reed will have a larger opening that you squeeze together with your fingers in front of the first ring. You will also have increased resistance by pinching at point (14). Further, pinch over and under the second ring (13).

Too hard tonguing: Scrape with a knife the outer side of the tip (5 and (7). Point (9) will give you easier striking and larger flexibility. Try also the points at (1) and (4).

Too easy tonguing: Pinch together the reed with your fingers and grind (with wet-strength sandpaper P1000) the front edge of the tip (17), or cut the reed 0,5 mm. Tighten the first ring (10). Further scrape at point (21). You can also pinch the reed on both sides at point (14).

Too low in the high register: Ream out the reed or cut it. Pinch on both sides of the reed at second ring (11) and/or pinch together the reed at the first ring, point (12).

Too high in the low register: Pinch together the reed at second ring (13). Scrape at point (1), and if needed at point (3). Scrape at point (16), the "eyes".

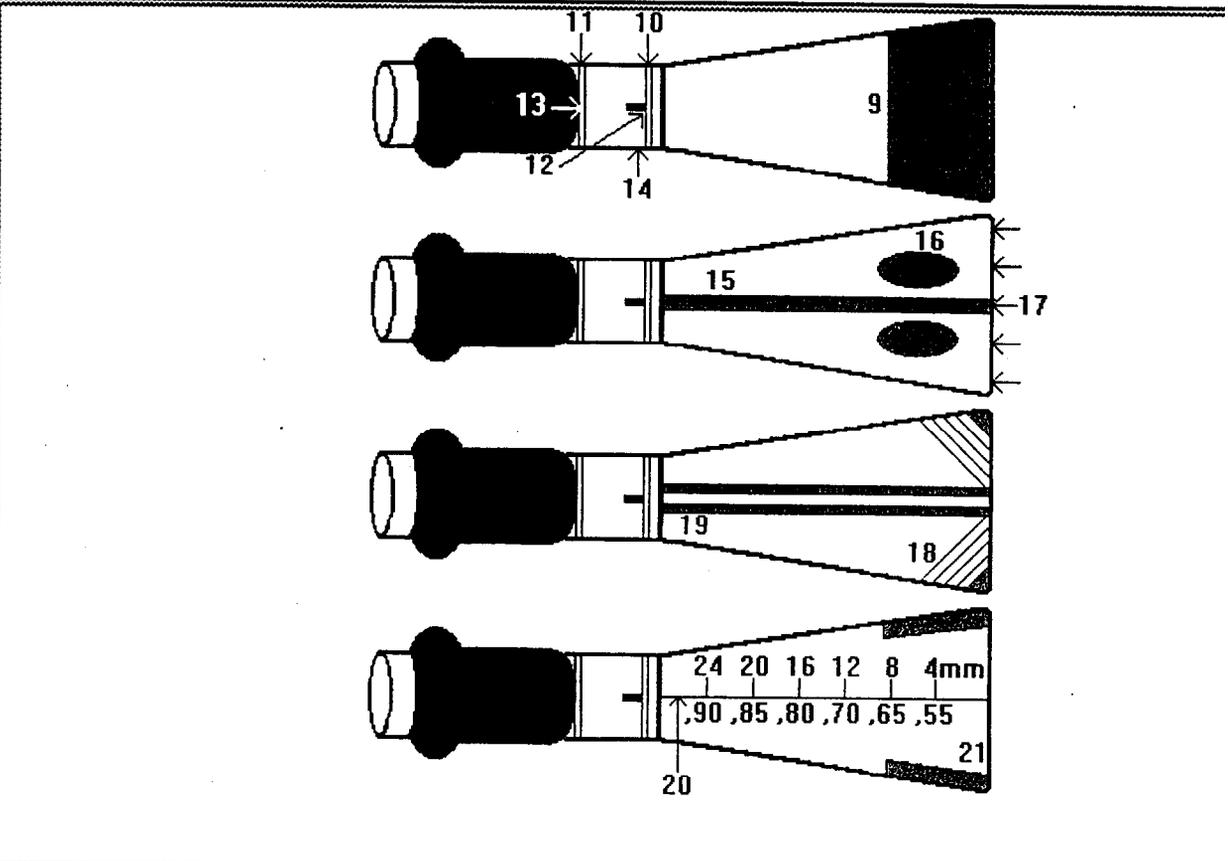
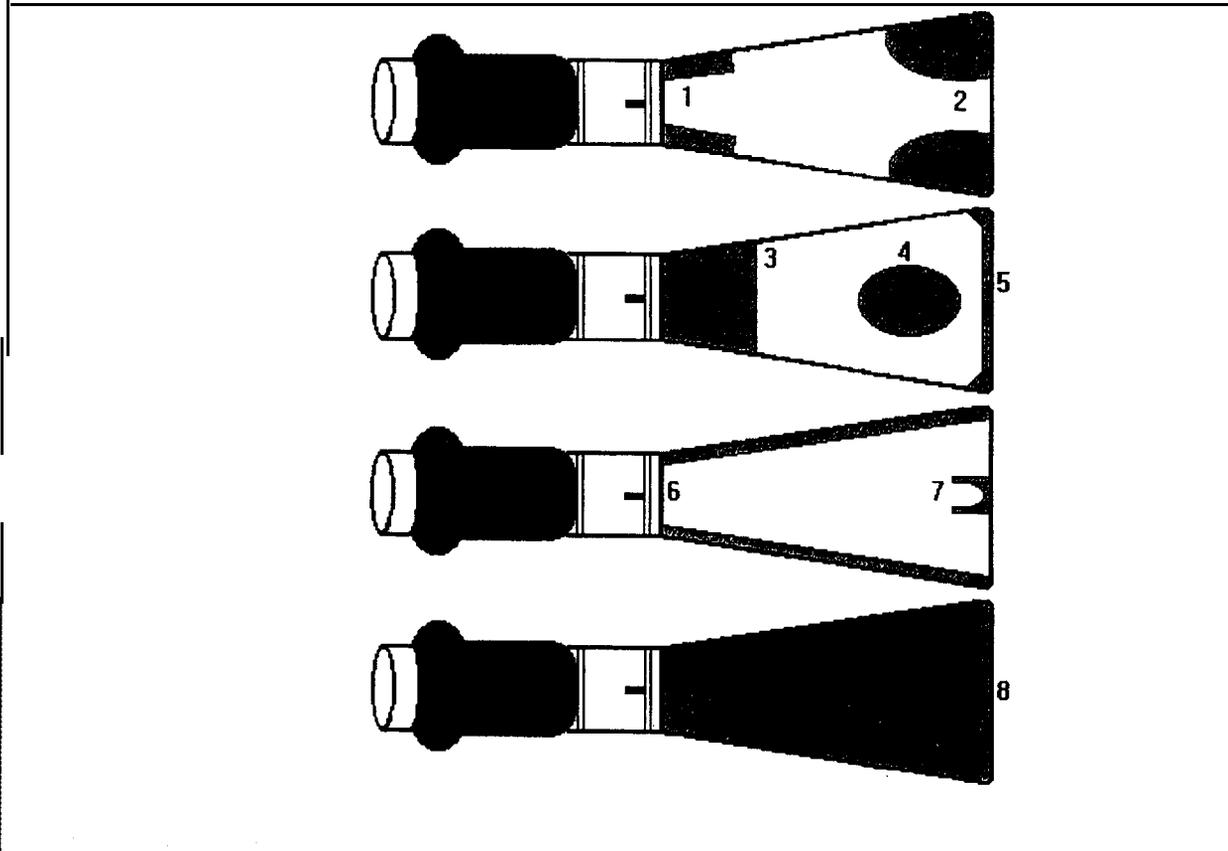
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What happens when scraping or adjusting the different points?

There is a lot to be said about this and a great deal you will notice yourself. I will describe in general terms what basically happens.

- 1) Scraping here gives you a freer reed. The sound gets slightly darker and the low is increased.
- 2) Tonguing becomes easier. Better flexibility over the **whole** register. Intruding **sounds** are muted.
- 3) The low register becomes easier.
- 4) The "Heart", **the** core of the tone. Too **little** in this **area makes** the reed collapse **and** too much gives you a heavy reed with bad striking and un-flexibility when playing **legato**. Try other measures before scraping here but if you must scrape, then just a little at the time. The tone gets brighter **and** weaker but freer when you scrape here.
- 5) Tonguing becomes easier as well as playing pianissimo in the upper registers.
- 6) Scraping along the edges dampen the sound with a slightly darker tone. The **reed** becomes more flexible. If you take too much here in comparison to the middle **of the** reed, an imbalance arises and the reed **becomes** unstable, stiff and resistant.
- 7) Gives an easier high register **and tonguing**. **You also get a brighter sound**.
- 8) If you grind evenly over the whole reed it will retain its internal **relationship to itself and** will become lighter.
- 9) Makes the high register easier, **improves** the striking, **gives a brighter sound and** more flexibility.
- 10) The sides of the first ring. The **first ring** shouldn't be pulled too tight as it restrains the vibrations of the reed. If it is pulled too hard and you want a freer reed, just loosen it up a bit. By pinching the reed on both sides you will have a larger opening, more resistance, a darker sound, and easier low register.
- 11) The sides of the second ring. The second ring should be relatively firmly pulled. Pinch on both sides and you will have a smaller opening, greater stability and easier high register.
- 12) Over and under of the first ring. Pinch the reed together here and you will have a smaller opening, brighter sound and easier high register.
- 13) Over and under of the second ring. Pinch here and you will get a larger opening, more volume, easier legato, a darker sound and easier low register.
- 14) The sides behind the first ring. Pinch here and you will get a darker sound, more resistance and stability.
- 15) "The Back". Too much wood here will give you a hard, stubborn reed. Too **little** wood will cause **the** reed to collapse.
- 16) If you grind here the reed will become more flexible and more vibrant. **Also** the high register **is** improved. The sound gets brighter.
- 17) Pinch together the tip with your fingers and grind the front edge if the tonguing is too easy.
- 18) Improves the tonguing in the high register and the gives a freer low. The **more** you grind towards the middle of the reed (the marked lines), the darker, more flexibility and better striking and legato you will get.
- 19) If you feel that the sound is "dead" you can, as a last resort, drag the knife along these lines, but only a couple of times. This will give you more sting in the sound.
- 20) If you have a gauge you can measure different points of thickness on the reed. This suggestion will give you a reed in good balance **with a lot of power** when using normal dense cane. At the same time it gives you an idea of the incline from the tip of the reed to the back (when looking from the side). If you want a lighter reed, just evenly scrape **down the** whole surface so the relations will remain within the reed. Measure in the middle of the reed (the back) from the tip. Four mm into the reed the thickness is 0,55 mm, eight mm into the reed • 0,65 mm, twelve mm in • 0,70 mm, sixteen mm in • 0,80 mm, twenty mm in 0,85 mm, and twenty-four mm in • 0,90 mm.
- 21) Holds back the sound, gives more resistance and darker sound. Improves upper register.

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APPENDIX C
DOUBLE REED SUPPLIERS

The following are some of the companies that I have used in the past for reeds and reed-making supplies. There are many others that can be found in the Journal of the International Double Reed Society. There are also a number of companies who have internet sites.

Allegro Woodwind Supply
P.O. Box 365
Carlsborg, WA 98324
(360) 68 1-7374

Christlieb Products
33 11 Scadlock Lane
Sherman Oaks, CA 91403
(888) 783-6554

Charles Double Reed
141 West 28th St, Suite 1203
New York, NY 10001
(212) 967-3 113
www.charlesmusic.com

Vigder's Bassoon Supplies
11746 Goshen Ave #3
Los Angeles, CA 90049
(3 10) 23 1-0220

Jones Double Reed Products
P.O. Box 3888
Spokane, WA 99220-3888
(509) 747-1224

Ann Hodge Double Reed Supplies
10823 Boysenberry Court
Waldorf, MD 20603
(888) 685-0548

Edmund Nielsen Woodwind Supplies, Inc.
61 East Park Blvd.
Villa Park, Ill. 60 18 1
(708) 833-5676
www.nielsen-woodwinds.com

Forrest Music
1849 University Ave
Berkeley, CA 94703
(510) 845-7178

Jack Spratt Woodwind Shop
11 Park Ave., P.O. Box 277
Old Greenwich, Conn. 06870
(800) 626 -9277

Claude F. Reynolds Oboe Shoppe
P.O. Box 180005
Dallas, TX 752 18-005
(2 14) 348-3373