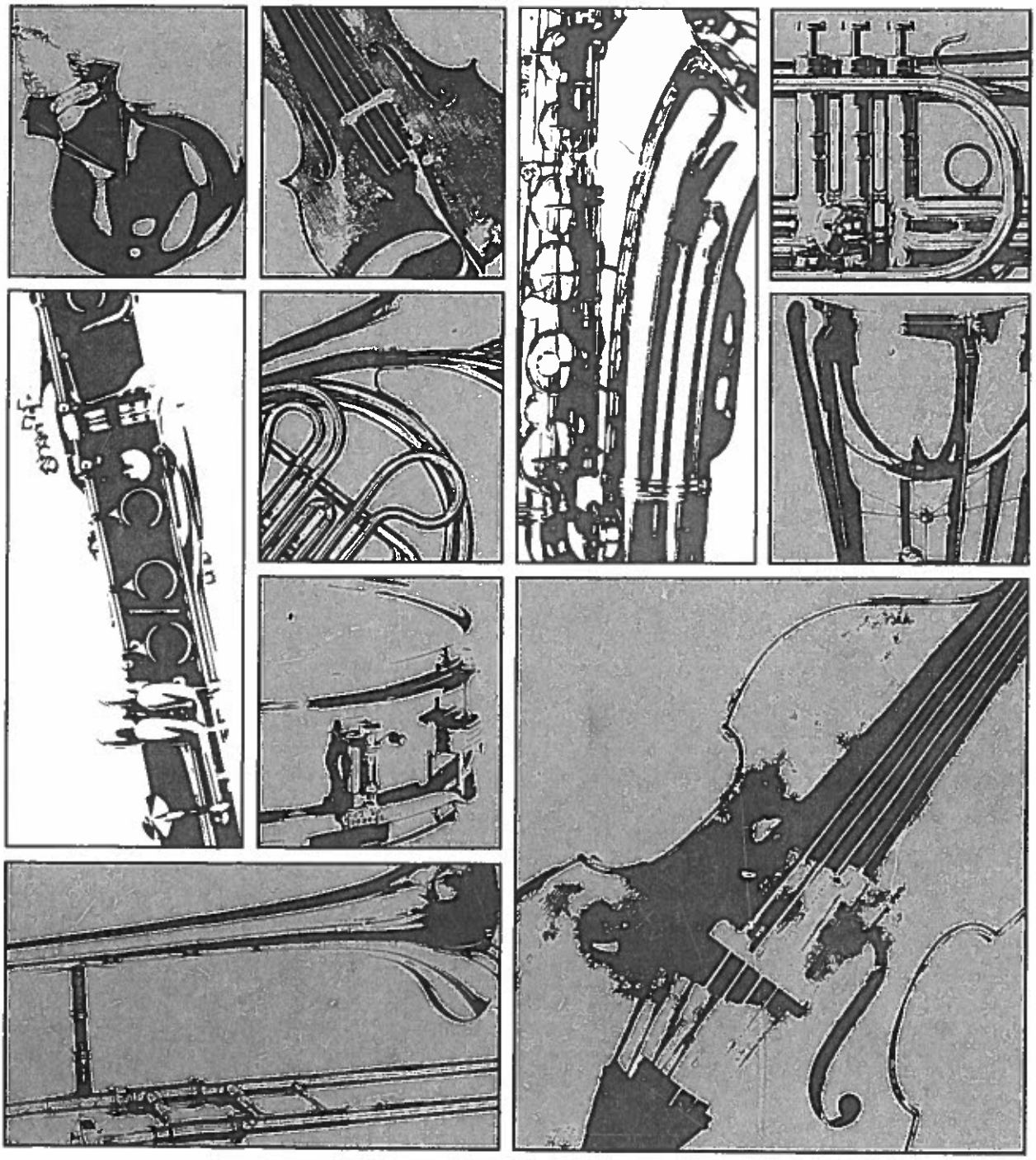
Woodwind Ensemble Method

beginning class instruction

Third Edition



Frederick W. Westphal

College Instrumental Technique Series

PARTS OF THE FLUTE

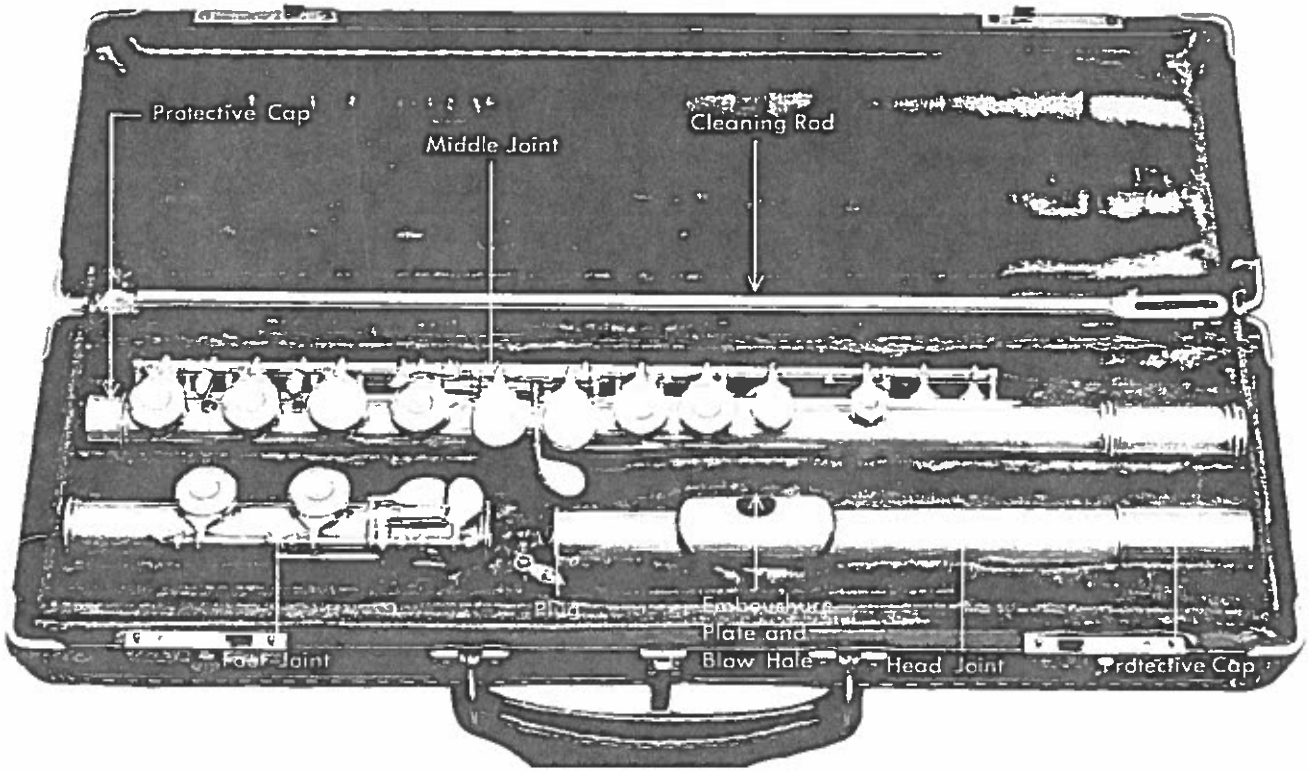


FIGURE 1. Parts of the Flute

ASSEMBLING THE FLUTE

Correct assembly and disassembly of your instrument will help keep it in the best playing condition, and help establish the proper playing position. The following procedure is an efficient one for beginners:

1. Remove the protective cap from the middle joint and hold it by the end away from the mechanism.
2. Take the foot joint by the end below the key mechanism and attach it to the middle joint with a slight winding motion back and forth. Line up the foot joint so that the rod on which the keys pivot is exactly centered with the keys on the top of the middle joint.
3. Remove the protective cap from the head joint and holding the middle joint at the top away from the key mechanism, attach the two with a slight winding motion. Line up the head joint so that the embouchure hole is in a straight line with the keys on the top of the instrument.

FLUTE PLAYING POSITION

1. The flute is held to the right of the body with the instrument angling slightly downward. The head is tilted so that the line of the lips follows the line of the flute. Head erect except for a slight tilt to the right; eyes straight ahead; shoulders turned naturally to the right; elbows free from body; wrists flat and adjusted to the proper finger positions (Figure 2). In a seated position, turn the chair slightly to the right so that the back corner will not interfere with right arm or shoulders.
2. *Left Hand.* The body of the flute rests on the index finger between the knuckle and the first joint. The thumb is curved slightly to contact the B-natural or B-flat lever slightly above the middle joint (Figure 3).

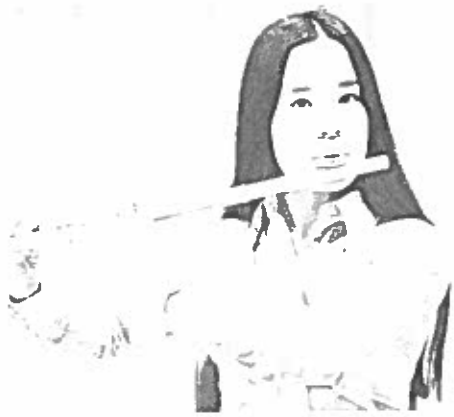


FIGURE 2. Flute Playing Position

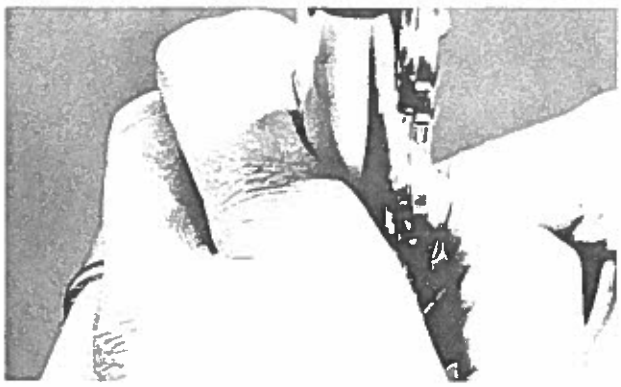


FIGURE 3. Flute Left Index Finger and Thumb

3. To reach the proper holes the index finger has a considerable curve, the other fingers less curve, with the little finger almost straight. The cushions of the fingers contact the keys in the center of the indentations (Figure 4).

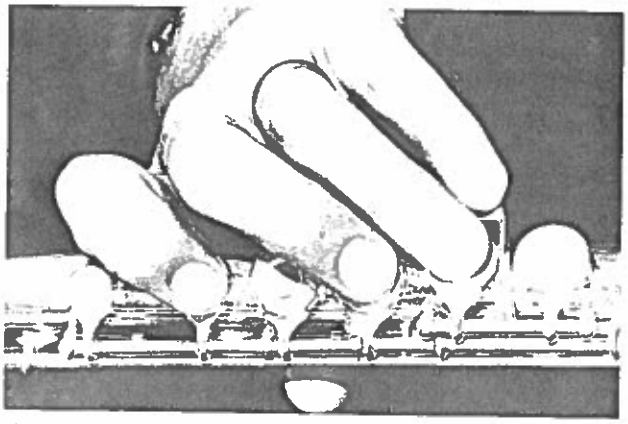


FIGURE 4. Flute Left Hand Position

4. *Right Hand.* The body of the flute is supported on the cushion of the thumb contacting the tube opposite the space between the first and second fingers (Figure 5).

5. The little finger helps balance the instrument by pressing the D-sharp key (on all notes except D-natural). Cushions of the remaining fingers contact the center of the indentations of their keys (Figure 6).

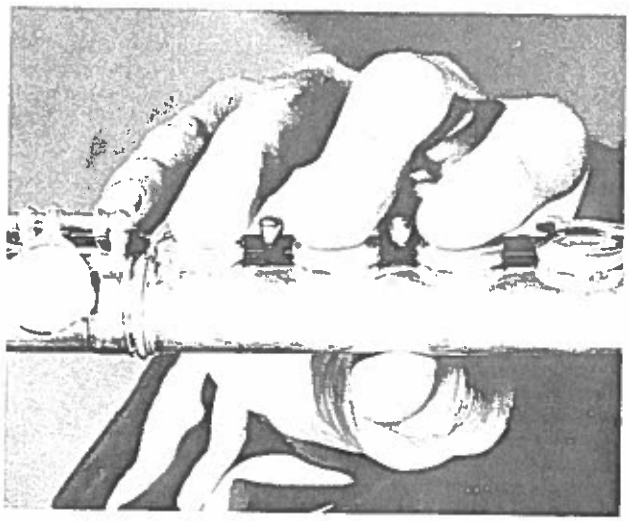


FIGURE 5. Flute Right Thumb Position

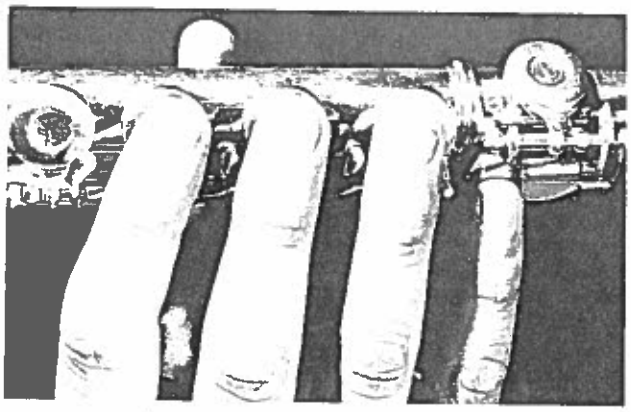


FIGURE 6. Flute Right Hand Position

6. *Guide Position.* The instrument is held securely through support of the right thumb and the index finger of the left hand, assisted by the right little finger and the contact of the lower lip with embouchure hole. With the addition of the left finger touching lightly but not pressing the G-sharp key a guide position (Figure 7) is set up which will maintain the correct playing position and facilitate rapid progress in performance. Check this guide position often, until it becomes automatic.

FIGURE 7. Flute Guide Position

EMBOUCHURE FORMATION

Follow the directions of your instructor, or use the following procedure which is one of the standard flute embouchure formations. Check constantly with a mirror until the formation becomes established.

1. Hold the head joint with the embouchure hole against the lips. Feel with the tongue so that the hole is centered on the lips.

2. Roll the joint forward until the embouchure hole is parallel with the floor, and so that the lower lip covers one-fourth to one-half of the hole.

3. Keeping the lower lip relaxed, pull the corners of the mouth back slightly to firm the upper lip.

4. Allow the center of the upper lip to relax and produce an opening no more than one-sixteenth of an inch high and one-half inch long. The desirable opening is

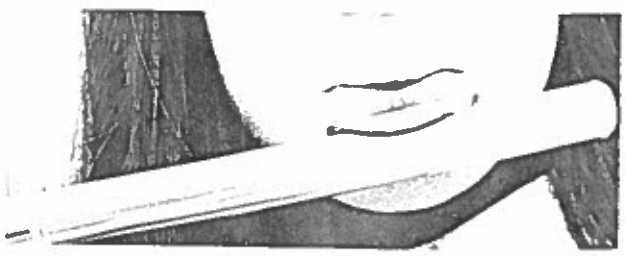


FIGURE 8. Flute Embouchure

more of a diamond shape than an oval. It should never be circular.

5. When this is established proceed with preliminary tone production.

PRELIMINARY TONE PRODUCTION

Before producing a tone on the instrument practice with the head joint alone:

1. Hold the head joint with the left hand and stop the open end with the right. Using standard abdominal breath support, blow a gentle concentrated stream of air through the hole in the lips directed toward the opposite edge of the embouchure hole rather than down into it. Move the lower jaw and lips slowly back and forth until a tone which approximates  is produced.

2. Continue to experiment with the speed of air through the lips and the adjustment of the lower jaw and lips until a rather full steady tone can be sustained for at least ten seconds.

3. Open the end of the head joint and repeat the process to produce a pitch which approximates: 

4. A slightly greater pressure of the breath, and a change in its direction achieved by pushing the jaws and lips slightly more forward rather than down is necessary to produce this pitch.

5. If these two pitches are produced easily, experiment to produce two notes, using a greater velocity of air and adjusting the lower jaw and lips to produce the higher pitch:

Closed end: 

Open end: 

Success in producing a clear full tone on the flute is determined by four closely interrelated factors: (1) the amount of embouchure plate covered by the lower lip, (2) the direction of the stream of air, (3) the focusing of a concentrated stream of air determined by the size and shape of the aperture formed by the lips, and (4) the use of standard abdominal breathing and breath support.

CARE OF THE FLUTE

The instrument must be thoroughly cleaned and put in its case after each use. Disassemble in the reverse order of assembly, holding the instrument as instructed to prevent damage to key mechanism. Use a soft lint-free handkerchief or chamois skin in the cleaning rod to dry the inside. Wipe the outside with a soft cloth. Do not use silver polish on the flute, unless specifically directed by your instructor. If dust accumulates beneath the key mechanism it can be removed with a soft watercolor brush. The mechanism should be oiled three or four times a year. A special "key oil" is commercially available. A drop of oil on the end of a needle or toothpick, or with the applicator provided with the oil, should be put at each pivot screw of each key.

Keep the protective caps in place. Keep inside and outside of connecting joints clean so the instrument can be assembled easily. If joints are clean and the instrument is still difficult to assemble, use a small amount of prepared joint grease, or in an emergency a small amount of vaseline. Instruments in good condition do not need this lubrication.

Place the parts in the case carefully with the keys up. Figure 1 gives a typical arrangement of parts in the case. There is only one correct way in which the parts will fit. Do not force the case closed. If it doesn't close easily, check the arrangement of the parts in the case.

Keep the instrument away from all sources of heat and out of direct sunlight.

TUNING AND INTONATION

The flute is a nontransposing instrument, i.e., "A" played on the flute sounds "A" on the piano, the music sounding exactly as written. A-440 is the standard tuning note for the instrument, although bands frequently use B-flat instead, since this is a better tuning note for the brass instruments. For accuracy the tuning note should be sounded by a tuning fork, tuning bar, or electronic tuner, or checked with an electronic aid. Tune with the piano if playing with one, or if no other comparison source is available. Even with regular tuning, pitch on a piano fluctuates and is not the best source for a tuning note.

In the very beginning stages of learning to play, tuning and intonation present some difficulties. However as the embouchure develops and technical facility is increased, more and more attention must be given to intonation and tuning. Use of an electronic aid such as the stroboscope is invaluable.

The flute is tuned with the head joint. Pulling the head joint out from the middle joint makes the overall pitch of the instrument flatter, pushing it in makes it sharper. Most flutes are made to sound A-440 with the head joint slightly out from the middle joint.

The plug at the end of the head joint determines the basic intonation of the instrument with itself, and must never be used for tuning. Once set in the proper position the plug must never be moved. The proper adjustment of the plug is made with the use of the cleaning rod provided with the instrument. The plug is adjusted so that the line etched on the cleaning rod is exactly in the center of the blowhole when the rod is inserted in the head joint and is against the plug. The intonation may be checked or, in the absence of a cleaning rod, set by adjusting the plug so that the three "D's" are in tune with each other. In teaching careful attention to the adjustment of this plug is necessary since young students pull it out of position by turning the screw cap. Frequently serious intonation problems which students have can be solved by a simple adjustment of the plug.

Once the instrument itself is accurately tuned to the standard pitch, the remainder of the intonation on the instrument is dependent on the player. The intonation is controlled primarily by the embouchure with the assistance of proper breath support. Good intonation is the product of careful and continuous attention.

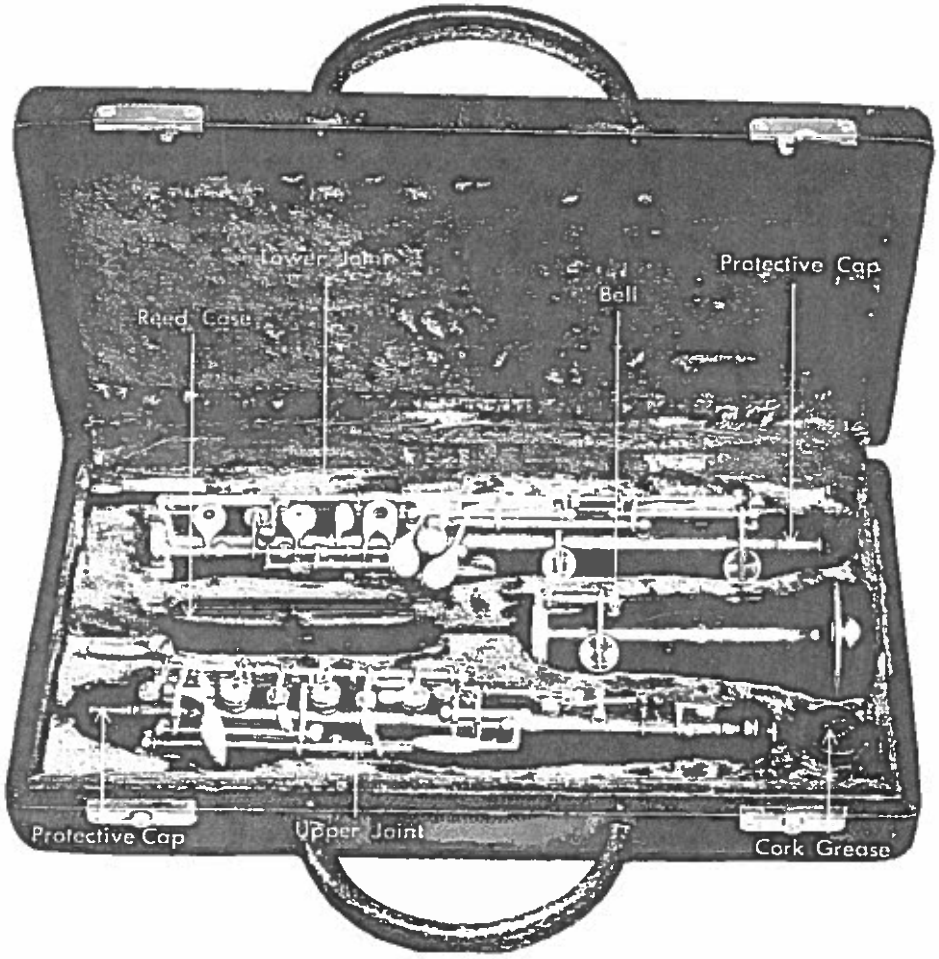


FIGURE 9. Parts of the Oboe

ASSEMBLING THE OBOE

The key mechanism of the oboe is both complicated and delicate, and it is of the utmost importance that assembly and disassembly be done carefully. Before starting the assembly process be sure that all cork joints are well lubricated with prepared cork grease. Do not put pressure on keys or rods when putting the instrument together. The following procedure is an efficient one for beginners:

1. To place the bell on the lower joint, grasp the bell in the right hand with the thumb closing the pad so that the lever which connects with the lower joint is raised. The lower joint is held in the left hand near its lower end and avoiding pressure on keys and rods. Push the two parts together with a slight twisting motion. Line up the two parts of the connecting lever.

2. Putting the upper and lower joints together must be done with extreme care, since there are three (more or less depending on the model of the instrument) connecting levers between the two parts which must be kept in perfect adjustment if the instrument is to play properly. Grasp the upper joint with the left hand with the fingers depressing the keys to raise the connecting levers and the lower joint in such a way that the keys are *not* depressed. Hold the bottom of the joints toward you and watch the connecting levers while joining the two parts with a slight twisting motion. Line up the connecting levers.

3. Push on the reed firmly, lining up the flat side with the keys on the top of the instrument.

OBOE PLAYING POSITION

1. The oboe is held directly in the center of the front of the body (Figure 10); the instrument at about a 40° angle with the body (Figure 11). Head erect, chin up, eyes straight ahead, with the shoulders up but relaxed. Elbows should hang naturally away from the sides of the body.

2. The right thumb contacts the thumb rest on the flesh to the side of and at the base of the nail, with the ball of the thumb against the body of the instrument (Figure 12).

3. The right little finger touches the C key lightly, and the remaining fingers fall naturally into position no more than an inch directly above the three tone holes. Let the tips of the fingers overlap the plates slightly so that the ball of the finger is in the center of the plate.

4. The left thumb assists in balancing the instrument and controls the first octave key. It is placed at an angle across the instrument so that the fleshy part of the ball is against the wood of the instrument, with the side

FIGURE 10. Oboe Playing Position Front View

FIGURE 11. Oboe Playing Position Side View

FIGURE 12. Oboe Thumb Positions

touching but not pressing the octave key (Figure 12). The octave key is controlled by vertical movements of the first joint of the thumb in most instances. In some instances, however, the best finger coordination can be achieved by removing the thumb from the instrument just before it is to be used.

5. The left little finger touches lightly the B key and the remaining fingers fall naturally into position not more than an inch directly above the three tone holes.

6. *Guide Position.* With the hands and fingers in this position a *guide position* (Figure 13) is established which should be consistently maintained. Observe that the fingers approach the instrument from a slight upper angle, and the wrists are flat.

In fingering the instrument the entire finger moves from the knuckle and closes the tone holes with a snap or click, pressing just hard enough to close the holes. Avoid too much pressure against the plates with the fingers.

EMBOUCHURE FORMATION

Follow the directions of your instructor, or use the following which is one of the standard formations for oboe. Check regularly with a mirror until the formation becomes established.

1. With lips relaxed, drop the lower jaw so that the teeth are about a half-inch apart. Place the tip of the reed in the center of the lower lip.

2. Roll the lower lip over the teeth until the tip of the reed is sticking just past the lip. Keeping the lower jaw down, bring the upper lip barely over the teeth.

3. Bring the lips together, pushing the corners of the mouth slightly toward the reed so that the reed is supported with slight pressure from all directions.

FIGURE 13. Oboe Guide Position

4. Keep the lower jaw open so that there is minimum pressure against the reed with the lower teeth.
5. When this is established, proceed with preliminary tone production.

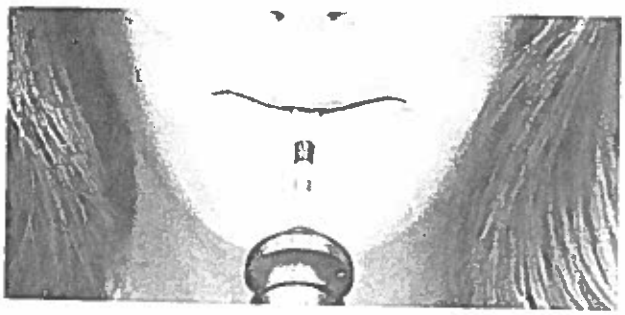


FIGURE 14. Oboe Embouchure

PRELIMINARY TONE PRODUCTION

Before producing a tone on the instrument practice with the reed alone.

1. The reed must be properly moistened each time it is used in order to reach its normal playing shape and so that the correct response can be achieved. Place the reed tip down in about a half-inch of water for five minutes, more or less depending on the cane. Only the blade of the reed should be in the water. Never let the water reach the fishskin covering.
2. Form the embouchure, checking continually in a mirror to see that it is correct.
3. Using a little more reed in the mouth than will be used in playing on the instrument, produce a sound, using standard abdominal breath support.
4. Continue blowing, checking embouchure formation, until the characteristic "double crow" can be produced and sustained for five to ten seconds.
5. When this is accomplished put the reed on the instrument, adjust the amount of reed in the mouth to the proper playing position and practice exercise 1.

The selection and adjustment of a reed for a beginner is highly critical. A good reed for a beginner blows quite easily, and will produce a reedy quality on the instrument which will improve as the embouchure strengthens.

CARE OF THE OBOE

The instrument must be thoroughly dried and put in its case after each use. Wooden instruments crack if moisture is left in them. Disassemble with the utmost care in the reverse order of assembly.

Dry the inside of each piece thoroughly with swabs. At least three types of swabs are available for the oboe: wool swabs, cloth or chamois swabs, and feathers. The only criteria for swab selection is that the entire inside of the instrument be thoroughly dried. Be sure you have swabs which will dry the entire inside of the instrument, including the top joint. Swab each part several times if necessary.

Put the protective caps in place and put the parts in the case carefully with the keys up. Figure 9 gives a typical arrangement of parts in the case. There is only one correct way in which the parts will fit. Do not force the case closed. If it doesn't close easily, check the arrangement of the parts in the case.

Keep the instrument away from all sources of heat and out of direct sunlight.

CARE OF THE OBOE REED

The reed should be blown free of moisture and kept in a special case made for this purpose in order to prevent damage and to keep it from drying out too rapidly. If plastic tubes are used for reed storage, drill small holes in both ends of the tube to provide for air circulation, otherwise the reed will not dry properly. Reeds left loose in the case are soon damaged beyond use. A reed case is a wise investment.

Clean the inside of the reed every week or ten days with a wet pipe cleaner when the reed is well soaked. Insert the wet pipe cleaner through the tube from the cork and force it gently through the tip of the reed. Then pull it through the reed slowly moving it from side to side so that all inside surfaces are cleaned. Repeat the process two or three times.

Keep the fingers off the tip of the reed!

TUNING AND INTONATION

The oboe is a nontransposing instrument, i.e., "A" played on the oboe sounds "A" on the piano, the music sounding exactly as written. A-440 is the standard tuning note for this instrument, although bands frequently use B-flat instead, since this is a better tuning note for the brass instruments. For accuracy the tuning note should be sounded by a tuning fork, tuning bar, or electronic tuner, or checked with an electronic aid. Tune with the piano if playing with one, or if no other comparison source is available. Even with regular tuning, pitch on a piano fluctuates and is not the best source for a tuning note.

In the very beginning stages of learning to play, tuning and intonation present some difficulties. However as the embouchure develops and technical facility is increased, more and more attention must be given to intonation and

tuning. An electronic aid such as a stroboscope is invaluable.

On the oboe it is not the instrument itself which is tuned, but the reed. Correct tuning is part of the process of making an oboe reed, and every player who makes his own has an A-440 tuning fork for this purpose. Correct pitch is determined by the length of the reed and by the way in which the lay is cut.

Earlier it has been suggested that the beginning oboist use reeds made by a professional player. If reeds are being ordered for a particular instrument, the brand name and model of the instrument being used should be indicated, along with the information that the reed is for a beginning player. Then the reed can be made to fit its use.

If the reed being used is sharp or flat it can frequently be adjusted to the correct pitch. Seek the assistance of your instructor or a fellow student who is majoring on the oboe. However, reeds made by a professional are carefully tuned and should require little or no adjustment.

Slight adjustments in pitch can be made by adjusting the distance the reed is inserted into the end of the instrument. Pulling the reed out will flatten the overall pitch, pushing it in will sharpen the overall pitch. However, this device must be used with discretion since it also affects the intonation of the instrument with itself as well as ease of playing and tone quality.

If the reed itself is good, once it and the instrument are accurately tuned to the standard pitch, the remainder of the intonation on the instrument is dependent on the player. Intonation is controlled primarily by the embouchure with the assistance of breath support. Good intonation is the product of careful and continuous attention.

PARTS OF THE CLARINET

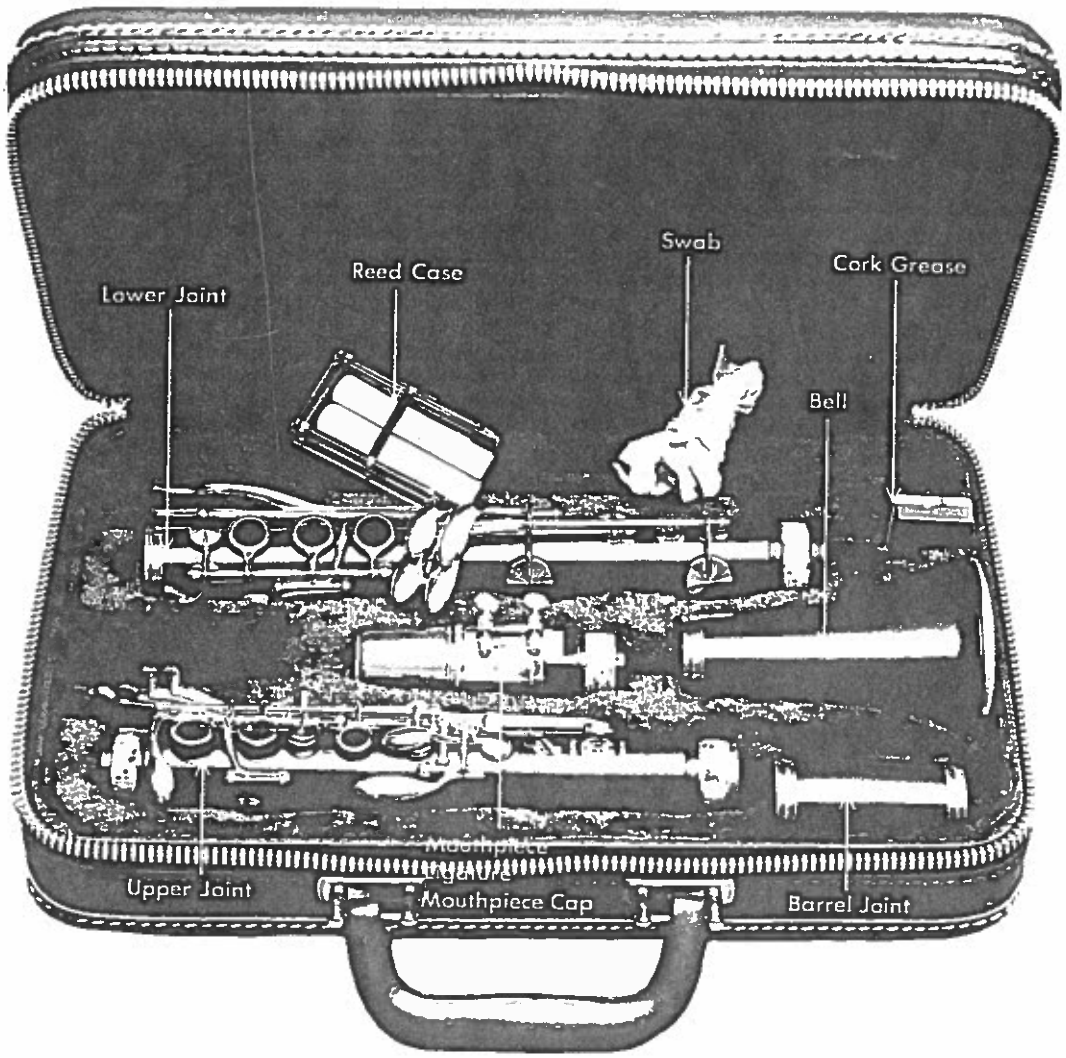


FIGURE 15. Parts of the Clarinet

ASSEMBLING THE CLARINET

Proper assembly and disassembly of your instrument will help keep it in the best playing condition. Do not put pressure on any keys when putting the parts together. Keeping all corks lubricated with cork grease will make assembly of the instrument an easy task. The following procedure is an efficient one for beginners:

1. Put the bell on the lower joint using a slight twisting motion.
2. Pressing down the rings on the upper joint to avoid bending the connecting lever, add it to the lower joint with a slight twisting motion. Line up exactly the two portions of the connecting lever.
3. Add the barrel joint.
4. Add the mouthpiece from which the ligature and reed have been removed, lining up the center of the flat side of the mouthpiece with the register key on the bottom of the clarinet.

ADJUSTMENT OF REED AND LIGATURE

To avoid chipping the tip of the reed, it is best to place the ligature loosely around the mouthpiece first and then slip the reed down inside it. The reed is placed exactly in the center of the lay (the flat part of the mouthpiece). Check both the tip and the butt end of the reed to see that they are properly centered. The tip of the reed should be down from the tip of the mouthpiece so that about a sixty-fourth of an inch of mouthpiece can be seen when looking directly at it. After the reed is properly placed locate the ligature so that its edges are over the guide lines etched in the mouthpiece, and tighten the screws slowly so that the reed is not moved out of place. The ligature should be just tight enough to hold the reed firmly. Proper placement of reed and ligature is of the utmost importance for ease of production and control of tone. Practice reed and ligature adjustment to develop accuracy in placement.

CLARINET PLAYING POSITION

1. The clarinet is held directly in the center of the front of the body (Figure 16), with the instrument at about a 40° angle with the body (Figure 17).
2. The weight of the clarinet is on the right thumb under the thumb rest and balanced between this point

FIGURE 16. Clarinet Playing Position Front View

FIGURE 17. Clarinet Playing Position Side View

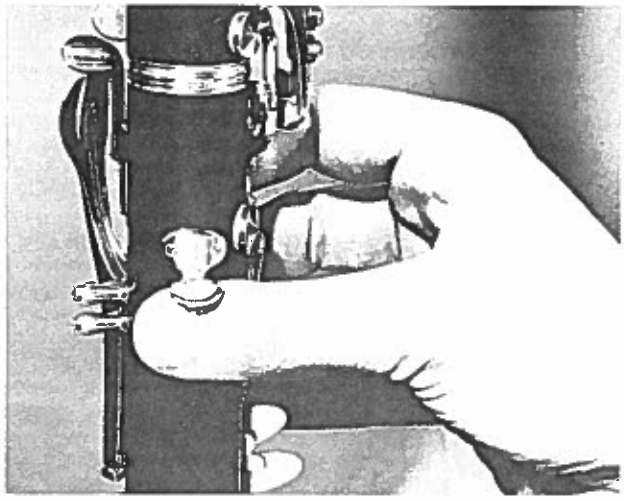


FIGURE 18. Clarinet Right Thumb Position

and the mouth. The thumb must contact the thumb rest on the flesh to the side of the nail (Figure 18).

3. The thumb of the left hand closes the hole under the instrument and manipulates the register key. This thumb is placed at an angle so that the fleshy part of the ball is closing the hole, and the side of the tip just touching, but not pressing the register key (Figure 19). The register key is controlled by vertical movements of the first joint of the thumb.

4. After thumb positions are established the remaining fingers of each hand lie in a natural curve and close the tone holes with the fleshy parts of the fingers away from the tip. The fingers may approach the clarinet at a slight upper angle with the wrists kept flat.

5. *Guide Position.* The use of the little fingers on guide keys help maintain the correct hand positions. The little finger of the right hand guides by touching lightly but not pressing key F, and the little finger of the left hand guides by touching lightly but not pressing key E. With the thumbs and little fingers in place, and the remaining fingers no more than one-half inch directly above their respective holes, a guide position of the hands is

FIGURE 19. Clarinet Left Thumb Position

established (Figure 20) which should be maintained constantly except when the little fingers are used in closing other keys. Proper establishment of this guide position maintains correct hand position and facilitates rapid progress in performance. Check this guide position often until it becomes automatic.

FIGURE 20. Clarinet Guide Position

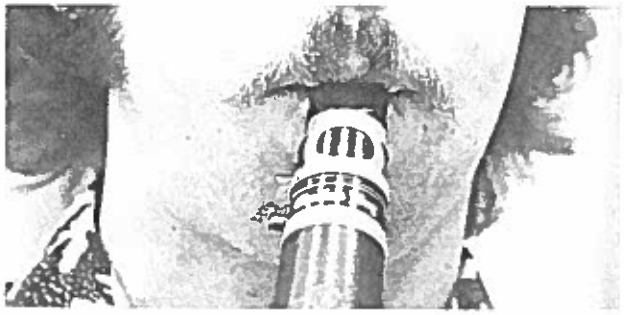


FIGURE 21. Clarinet Embouchure

EMBOUCHURE FORMATION

Follow the directions of your instructor, or use the following procedure which is one of the standard clarinet embouchure formations. Check regularly with a mirror until the embouchure formation becomes established.

1. Keeping the lips lightly together drop the lower jaw so that the teeth are about three-eighths of an inch apart.
2. Shape the lips as if saying the letter "O." The corners of the mouth are slightly compressed and there are wrinkles in the lips.
3. With the mouth dropped and the lips in the "O" position the rim of the lip which divides it from the chin should be directly in front of the top edge of the front teeth. Feel this with a finger and raise or lower the jaw until this relationship is correct.
4. Maintaining this position, insert the mouthpiece of the clarinet into the mouth allowing the reed to push the lower lip over the teeth. If the wrinkles in the lower lip are maintained, the line dividing the lip from the chin is directly over the front edge of the lower teeth. Students with thicker than average lips should adjust so that less lip is over the teeth.
5. Contract the lips and especially the corners of the mouth inward and around the mouthpiece so that there is pressure against the mouthpiece from all directions and no air can escape.
6. The end of the reed must be clear of any contact with the lip for three-eighths to a half inch in order to vibrate freely. Feel this with the tongue.
7. The upper teeth rest, but do not press, on the top of the mouthpiece about a half inch from the end.
8. The lower teeth remain in the open position established in step three above, and must not bite or exert pressure against the lower lip.
9. The chin is held in a firm flat position with a slight downward pressure against the lower lip.
10. Proceed with preliminary tone production described in the following.

PRELIMINARY TONE PRODUCTION

Before producing a tone on the instrument, practice with the mouthpiece alone.

1. Place a carefully selected reed on the mouthpiece in the proper place and adjust the ligature.
2. Form the embouchure, using a mirror to check its formation.
3. Using standard abdominal breath support produce a tone, checking to maintain the proper embouchure formation.
4. Continue practicing until you can produce a steady natural tone of the highest pitch, approximately  for at least ten seconds.
5. When you can do this easily you are ready to proceed with exercise 1.

CARE OF THE CLARINET

The instrument should be thoroughly dried and put in its case after each use. Disassemble in the reverse order of assembly. Dry the inside of each piece thoroughly with a chamois or cloth swab, always putting the swab in the upper end of the piece and drawing it out the lower end. Pull the swab through several times if necessary to completely dry the inside. If dust accumulates beneath the key mechanism it can be removed with a soft watercolor brush. The mechanism should be oiled three or four times a year. A special "key oil" is commercially available. A drop of oil on the end of a needle or toothpick, or with the applicator provided with the oil, should be put at each pivot screw of each key.

Place the parts in the case carefully with keys up. Most instruments will fit in the case only one way. Figure 15 shows a typical arrangement of parts in the case. Do not force the case closed. If it will not close easily check the placement of parts. Forcing the case closed will bend a key so that the instrument will not play properly.

Keep all cork joints well lubricated with prepared cork grease.

Keep instruments away from all sources of heat and out of direct sunlight.

CARE OF THE CLARINET REED

Remove the reed and dry the mouthpiece and reed. Reeds are preferably kept in a reed holder or case especially made for this purpose, although some clarinetists leave the reed on the mouthpiece. Reeds left loose in the case are soon damaged beyond use. Girls are warned that lipstick clogs the pores of the reed, soon making it difficult to play. Remove lipstick before playing. Keep

the mouthpiece cap in place on the mouthpiece when the instrument is not in use.

TUNING AND INTONATION

The clarinet is a transposing instrument. To sound the standard pitch of A-440 the clarinet plays third-line B. Bands frequently use B-flat for a tuning note, with the clarinets playing third-space C.

Clarinets are tuned with the barrel joint—never the mouthpiece. All standard brand clarinets are constructed to play slightly sharper than A-440 when the tuning barrel is entirely in. Therefore to tune to A-440 the tuning barrel would normally have to be pulled out approximately a sixteenth of an inch. If the instrument is still sharp, the barrel will have to be pulled further. Pulling the barrel joint out more than a quarter of an inch will frequently make the instrument badly out of tune with itself, as the pitch of some notes is effected more than others. The pitch of the throat tones such as second-line G is flattened more than that of third-line B, for example. If a clarinet student is consistently playing quite sharp or flat so that satisfactory tuning cannot be accomplished with the barrel joint, the cause is in the embouchure, mouthpiece, and/or reed, singly or in combination rather than in the instrument itself.

For accuracy, the tuning note should be sounded by a tuning fork, tuning bar, or electronic tuner, or checked with an electronic aid. Tune with the piano if playing with one, or if no other comparison source is available. Even with regular tuning, pitch on a piano fluctuates and is not the best source for a tuning note.

At the very beginning stages of learning to play, tuning and intonation present some difficulties. However as the embouchure develops and technical facility is increased, more and more attention must be given to intonation and tuning. An electronic aid such as the stroboscope is invaluable.

Good intonation on a clarinet, assuming that the instrument itself is constructed to play in tune, is determined by: (1) a mouthpiece which fits the instrument and whose tone chamber is properly designed, (2) a correctly formed and developed embouchure, and (3) a well adjusted reed which fits both embouchure and mouthpiece. Assuming that all these are right, the intonation on clarinet is controlled primarily by the embouchure with the assistance of proper breath support. Good intonation is the product of careful and continuous attention.

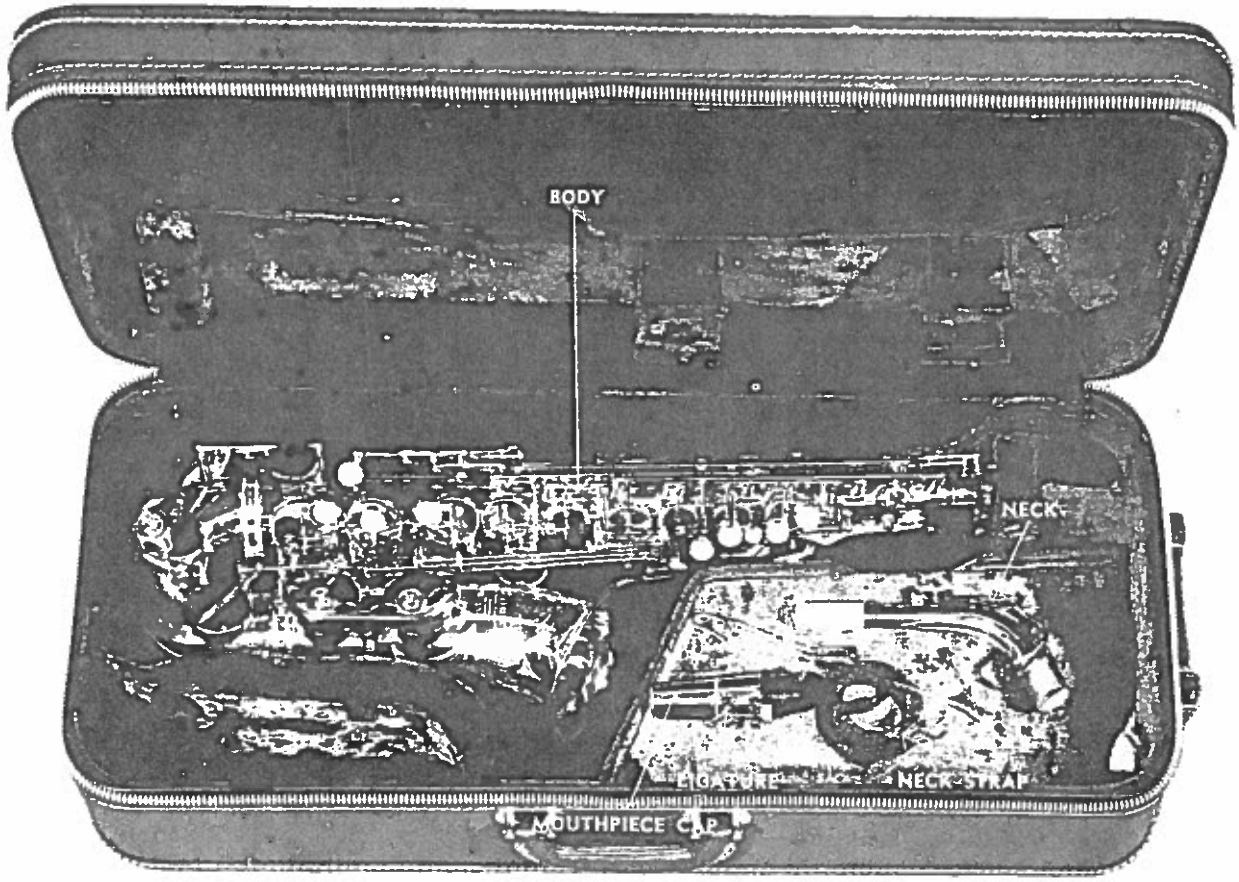


FIGURE 22. Parts of the Saxophone

ASSEMBLING THE SAXOPHONE

The mechanism of the saxophone is rugged, but the long rods, connecting levers, and side keys may be bent out of line if the instrument is not handled carefully. Do not put pressure on keys or rods when putting the instrument together. Before starting the process be sure the cork on the neck of the instrument is well lubricated with prepared cork grease. The following procedure is an efficient one for beginners:

1. Take the neck strap out of the case and put it into position around the neck. Examine the device which adjusts its length, and become familiar with its adjustment.
2. Grasp the instrument by the bell away from the keys. Holding it by the bell, hook the neck strap onto the body. Remove the end plug which protects the connecting lever for the octave key.
3. Check the tension screw(s) which holds the neck in place on the instrument to see that it is loose. Check the sleeve which fits into the body, and the end of the body itself to see that they are clean. If the neck fits into the body of the instrument with difficulty, it may be lubricated with cork grease or vaseline. Hold the neck in the palm of the right hand so the octave key is held down firmly. Holding the body of the instrument with the left hand, push the neck on. Avoid turning the neck in such a way that the connecting lever will be bent. Line up the brace on the bottom of the neck so that it is centered on the connecting lever on the body of the instrument. Tighten the tension screw to hold the neck firmly in place.
4. Hold the mouthpiece (with the ligature and reed removed) in the palm of the right hand, with the left hand on the neck, palm holding down the octave key. The weight of the instrument is on the neck strap. Push on the mouthpiece so that at least half of the cork is covered, the exact distance is determined by the tuning process. If the instrument has a tuning screw on the neck in addition to a cork, the mouthpiece must be pushed on to cover the entire cork.

ADJUSTMENT OF REED AND LIGATURE

To avoid chipping the tip of the reed it is best to place the ligature loosely around the mouthpiece first, then slip the reed down inside it. The reed is placed exactly in the center of the lay (the flat part of the mouthpiece). Check both the tip and the butt end of the reed to see that they are properly centered. The tip of the reed should be down from the tip of the mouthpiece so that about a sixty-fourth of an inch of the mouthpiece can be seen when looking directly at it. After the reed is properly placed locate the ligature so that its edges are over the guidelines etched in the mouthpiece, and tighten the screws slowly so that the reed is not moved out of place. The ligature should be just tight enough to hold the reed firmly. Proper placement of reed and ligature is of the utmost importance for ease of tone production and control. Practice reed and ligature adjustment to develop accuracy in placement.

SAXOPHONE PLAYING POSITION

1. The saxophone is held to the right of the body with the instrument resting against the side of the leg (Figure 23). The instrument is slightly out of the vertical position with the bottom further back. The right arm is relaxed with the elbow pushed back very slightly to put the right hand into the best playing position (Figure 24). The weight of the instrument is on the neck strap, and is balanced by the right and left thumbs and the mouthpiece in the mouth. Adjust the length of the neck strap so that the end of the mouthpiece touches the center of the lower lip.

2. The right thumb contacts the thumb rest on the flesh to the side of and at the base of the nail, with the ball of the thumb against the body of the instrument (Figure 25).

FIGURE 23. Saxophone Playing Position Front View

3. The left thumb has the function of operating the octave key. It is placed at a diagonal angle across the instrument so that the fleshy part of the ball is on the plate provided for it, and the tip of the finger is touching but not pressing the octave key (Figure 26). The octave key is controlled by vertical movements of the first joint of the thumb.

4. *Guide Position.* The left little finger touches lightly the G-sharp key, the right little finger the C key, and the remaining fingers fall into a natural curve without tension to contact the pearl buttons of their tone holes. With all the fingers in position a guide position is established which should be maintained constantly (Figure 27). Check this guide position often until it becomes automatic.

FIGURE 24. Saxophone Playing Position Side View

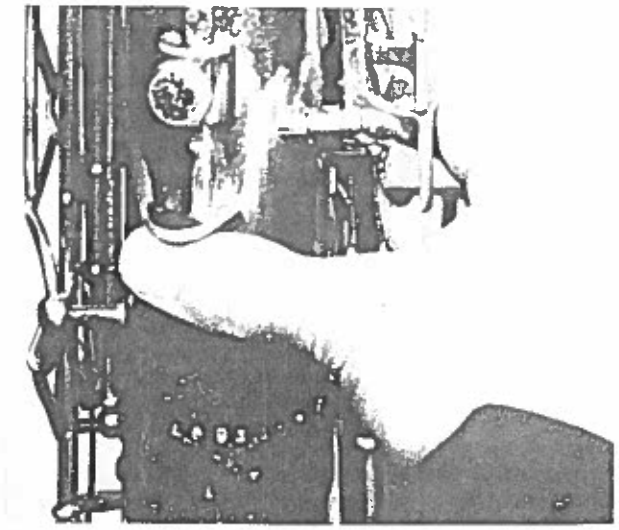


FIGURE 25. Saxophone Right Thumb Position

FIGURE 26. Saxophone Left Thumb Position

FIGURE 27. Saxophone Guide Position

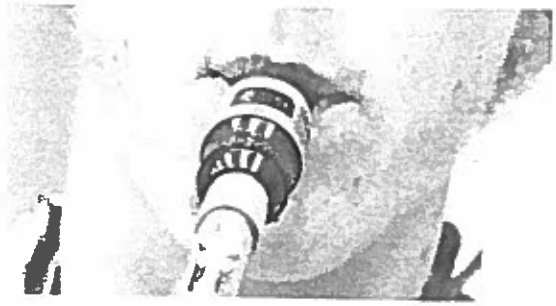


FIGURE 28. Saxophone Embouchure

EMBOUCHURE FORMATION

Follow the directions of your instructor or use the following procedure which is one of the standard saxophone embouchure formations. Check regularly with a mirror until the formation is established.

1. Keeping the lips lightly together, drop the lower jaw so that the teeth are about three-eighths of an inch apart.
2. Shape the lips as if saying the letter "O" with the corners of the mouth slightly compressed and there are slight wrinkles in the lips.
3. With the teeth open and the lips in the "O" position the rim of the lower lip which divides it from the chin should be directly in front of the top edge of the front teeth. Feel this with a finger and raise or lower the jaw until this relationship is correct.
4. Maintaining this position, insert the mouthpiece of the saxophone into the mouth allowing the reed to push the lower lip over the teeth. If the wrinkles on the lower lip are maintained, the line dividing the lip from the chin is directly over the front edge of the lower teeth. Students with thicker than average lips should adjust so that less lip is over the teeth.
5. Contract the lips and especially the corners of the mouth inward and around the mouthpiece so that no air can escape.
6. In order to vibrate freely, the end of the reed must be clear of any contact with the lip for three-eighths to a half inch on the alto saxophone, more on the tenor. The amount of mouthpiece in the mouth is determined by the mouthpiece itself—some require more mouthpiece in the mouth than others.
7. The upper teeth rest, but do not press, on the top of the mouthpiece somewhat forward of the position of the lower teeth.
8. The lower teeth remain in the open position established in step three above, and must not bite or exert pressure against the lower lip.
9. The reed and mouthpiece are supported and controlled by inward pressure toward the center of the mouthpiece by the upper and lower lips and by the corners of the mouth.
10. Proceed with the preliminary tone production described in the following.

PRELIMINARY TONE PRODUCTION

Before producing a tone on the instrument, practice with the mouthpiece alone.

1. Place a carefully selected reed on the mouthpiece in the proper place and adjust the ligature.
2. Form the embouchure, using a mirror to check its formation.
3. Using standard abdominal breath support produce a tone, checking to maintain the proper embouchure formation.
4. Continue practicing until you can produce a steady natural tone of the highest pitch for at least ten seconds.
5. When you can do this easily you are ready to proceed with exercise 1.

CARE OF THE SAXOPHONE

The instrument should be thoroughly dried and put in its case after each use. Disassemble in the reverse order of assembly. A swab made for the saxophone is used to clean the inside of the body of the instrument, and a special neck cleaner for the inside of the neck. Using a

chamois or soft cloth wipe the inside portion of the bell, then the body of the instrument to keep it clear of fingerprints. If dust accumulates beneath the key mechanism it can be removed with a soft watercolor brush. The mechanism should be oiled three or four times a year. A special "key oil" is commercially available. A drop of oil on the end of a needle or toothpick, or with the applicator provided with the oil, should be put at each pivot screw of each key.

Remove the reed and dry the mouthpiece and reed with a chamois or soft cloth. Reeds are preferably kept in a reed holder or case especially made for this purpose. Reeds left loose in the case are soon damaged beyond use.

Place the parts of the instruments in the case, being sure to replace the plug which fits into the small end of the body. The mouthpiece, ligature, reed case, neck, and neck strap are placed in a small compartment in the case to protect them. Do not force the case closed.

Keep the neck cork well lubricated with prepared cork grease, and the sleeve and its connecting part of the body clean and well lubricated.

Keep all instruments away from all sources of heat and out of direct sunlight.

TUNING AND INTONATION

Saxophones are transposing instruments. To sound the standard pitch of A-440 the alto saxophone plays F-sharp and the tenor saxophone B-natural. If a B-flat is sounded as a tuning note as it frequently is in bands, the alto saxophone plays G-natural and the tenor saxophone C-natural. The saxophone is tuned with the mouthpiece. If the instrument is flat when tuning, push the mouthpiece further on the cork, if the instrument is sharp when tuning, pull the mouthpiece out so less cork is covered. In general saxophones are made to sound A-440 when approximately half the cork is covered by the mouthpiece. Some saxophones have an adjustable tuning screw on the neck of the instrument in place of a long cork. On these instruments the mouthpiece is placed over the entire cork, and the tuning is done with the screw.

Intonation on a saxophone is determined by several things: (1) the construction of the instrument itself; (2) a mouthpiece which fits the instrument and whose tone chamber is properly designed; (3) a correctly formed and developed embouchure; and (4) a well adjusted reed which fits both embouchure and mouthpiece. Virtually all standard brand instruments are acoustically well in tune, and can be played in tune if other things are correct. Generally speaking a reed which is too hard tends to make the instrument sharp, while a reed which is too soft tends to make the instrument flat. The embouchure is the primary controlling factor in intonation. The amount of mouthpiece in the mouth is critical, too little will make the higher notes flat, too much mouthpiece in the mouth tends to make the general pitch of the instrument flat, as well as making it virtually impossible to control the pitch of individual notes. Biting with the lower teeth causes numerous complications. The angle at which the saxophone is held determines the way in which the embouchure can control it. A standard brand mouthpiece should be suspected of causing intonation problems only after embouchure and reed have been determined to be in good shape.

PARTS OF THE BASSOON

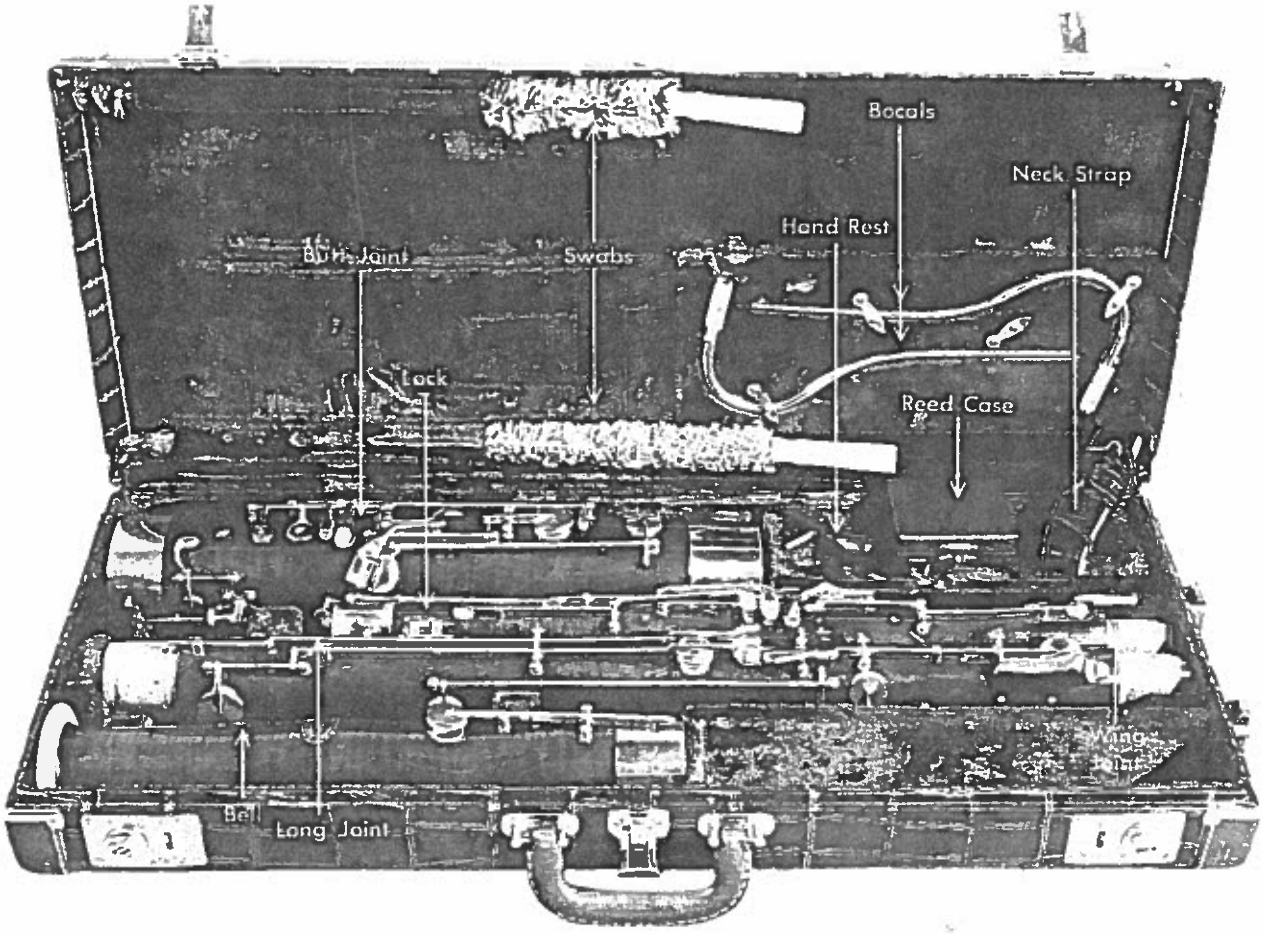


FIGURE 29. Parts of the Bassoon

ASSEMBLING THE INSTRUMENT

The key mechanism of the bassoon is complicated, and the long rods on which some of the keys operate make it of the utmost importance that assembly and disassembly be done carefully. Do not put pressure on keys or rods when putting the instrument together. Before starting the process be sure that all cork joints are well lubricated with prepared cork grease. The following procedure is an efficient one for beginners:

1. Put the wing joint into the small opening in the butt joint, grasping the wing joint in the left hand with the thumb in the curved portion beneath the cluster of keys and grasp the middle of the butt joint with the right hand. Push the two together with a slight twisting motion, lining up the curved portion of the wing joint with the other hole in the butt. Lay these assembled parts in the case.

2. Grasp the bell joint with the right hand pressing the key with the thumb and put it on the long joint lining up the connecting lever which operates the key.

3. The two assembled sections are then put together, holding the boot and wing joint in the right hand and the bell and long joint in the left. The long joint can be pushed into place with a slight twist.

4. Make final adjustments of the long and wing joints so that they lock together.

5. Insert hand rest for right hand and tighten screw to hold it in place.

6. Grasp the bocal near the cork and put it firmly in place. If the instrument has a whisper key adjust the bocal so that the pad of this key covers the small hole in the bocal.

7. Put the reed firmly in place.

BASSOON PLAYING POSITION

1. The weight of the bassoon is supported by a neck strap or a seat strap, with the lower part of the instrument against the right side of the player and balanced with the left hand. Adjust the height of the instrument with the strap so that when the head is erect the reed will touch the lower jaw just below the lips. The reed can be correctly taken into the mouth from this position.

2. The bell of the instrument is inclined toward the player's left so that the music can be seen over the bocal (Figure 31). Head is slightly inclined with the chin up and eyes straight ahead. Shoulders are up but relaxed. The elbows should hang naturally away from the sides of the body, with the right elbow raised slightly to maintain a straight wrist.

3. The left hand balances the bassoon, with the flesh below the knuckles resting against the wing joint (Figure 32). The fingers cover the three holes. The thumb has several keys to close, and must move from joints as well as the base to contact the keys. It is most frequently on the whisper key (Key W).

FIGURE 30. Bassoon Playing Position Side View

FIGURE 31. Bassoon Playing Position Front View

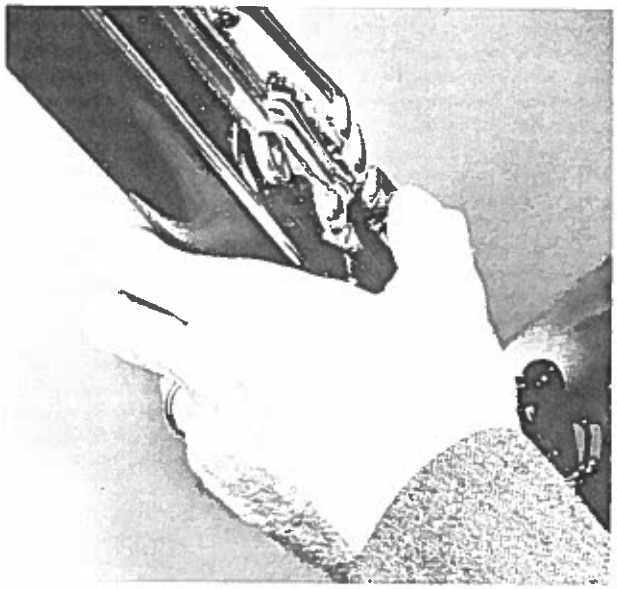


FIGURE 32. Bassoon Left Hand Support

4. The right hand is best supported with a hand rest attached to the instrument. This hand rest fits in the crotch between the thumb and first finger, leaving the fingers free to cover holes, and the thumb free to close its keys (Figure 33). The use of a hand rest is especially important for beginners.

Keep the fingers slightly curved, using the fleshy part of the fingers away from the tips on the holes, rings, and keys. Keep the fingers one-fourth to one-half inch directly over the proper holes or keys (Figure 34).

5. *Guide Position.* Proper establishment of a guide position (Figure 34) maintains correct hand and finger position and facilitates rapid progress in performance. With the left hand against the tenor joint, the right hand in the hand rest and the fingers directly over the proper holes, the left little finger touches lightly the D-sharp key and the left thumb touches lightly the whisper key—Key W (Figure 32). The right little finger touches lightly the F key, and the right thumb the E key (Figure 33). Thumbs and all fingers maintain this position except when they are used in closing other keys. Check this guide position often until it becomes automatic.

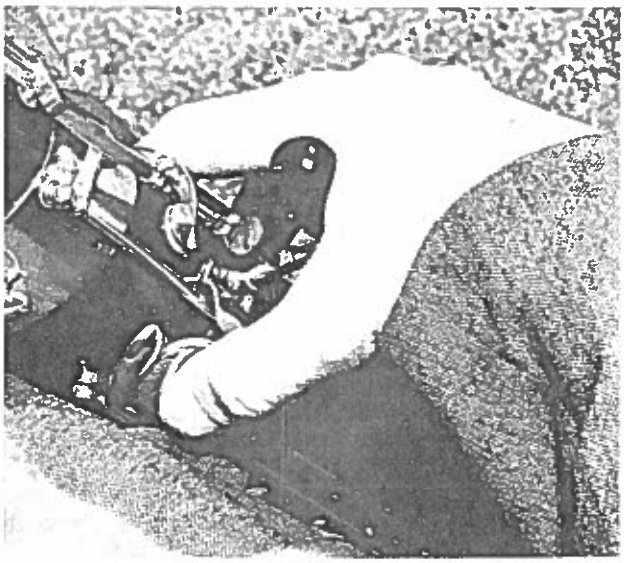


FIGURE 33. Bassoon Right Hand Support

FIGURE 34. Bassoon Guide Position

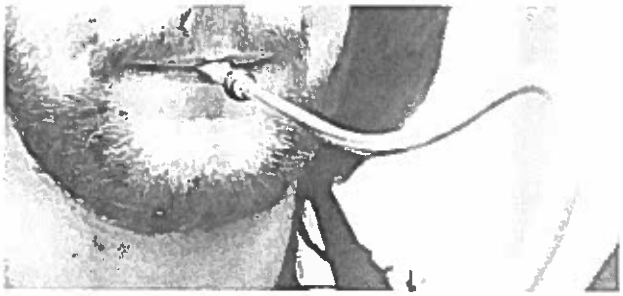


FIGURE 35. Bassoon Embouchure

EMBOUCHURE FORMATION

Follow the directions of your instructor, or use the following procedure which is one of the standard bassoon embouchure formations. Check regularly with a mirror until the embouchure formation becomes well established.

1. Keeping the lips relaxed, drop the lower jaw so that the teeth are about a half inch apart.
2. Pull the lower jaw back to increase the natural overbite. The jaw is kept back while playing.
3. Push the corners of the mouth toward the center as in whistling, forming wrinkles in the lips.
4. Maintaining the contracted position of the lips, roll them over the teeth so that virtually all of the lip is over the teeth. The exact amount of lip over the teeth varies from student to student depending on whether the lips are average, thin, or thick. Pull the chin muscles down. Avoid bunching under the reed.
5. Put the reed between the lips. The reed should be in the mouth far enough that the upper lip is almost touching the first wire. Contract the lips around the reed like a drawstring.
6. Continue with the following directions for preliminary tone production, which will establish the exact amount of reed in the mouth.

PRELIMINARY TONE PRODUCTION

1. Before producing a tone on the instrument, practice with the reed alone. The bassoon reed must be soaked each time before playing by placing it tip down in water for three to five minutes. The water should come only to the first wire, since immersing the entire reed may expand the tube and the binding will come loose. Some bindings have a waterproof coating in which case the entire reed may be soaked in water. Check with your instructor.
2. The setting of the embouchure is aimed at finding the exact formation and amount of reed in the mouth which produces the characteristic "double crow" on the reed alone. The well adjusted bassoon reed when blown alone produces a buzz commonly called a "crow" of two distinct pitches—one high and one low pitched. Some good reeds produce more than two pitches but the high and low ones will predominate in the sound.
3. Use a reed which has been prepared for playing and form the embouchure. Starting with just the tip of the reed between the lips produce a sound using standard abdominal breath support. The sound will be a thin, reedy buzz.
4. Keeping the sound continuous gradually increase the amount of reed in the mouth until the upper lip touches the wire on the reed. Considerable differences in sound will be readily apparent as the amount of reed in the mouth increases. Move it back and forth to note the immediate differences.
5. At some point as the amount of reed in the mouth is changed, the characteristic "double crow" of the bassoon reed will be heard with maximum resonance. This is the critical point on the cut of the reed, normally more than half way between the tip and first wire, and determines the exact amount of reed to be put into the mouth. This point should be approximately centered between the support provided by the upper and lower lips over the teeth.
6. Remember to use a good firm abdominal support of wind pressure while blowing into the instrument. Keep the lower jaw pulled back to increase the natural overbite. Under normal circumstances with a well adjusted reed, the upper lip will almost touch the first wire on the reed in the optimum position.
7. Continue practicing on the reed until the crow is easily produced and you can sustain it for five to ten seconds. When you can do this you are ready to proceed with the entire instrument and exercise 1.

CARE OF THE BASSOON

The instrument must be thoroughly cleaned and put in its case after each use. Disassemble with the utmost care in the reverse order of assembly. Dry the inside of each piece thoroughly with the special swabs provided. Shake and blow the moisture out of the bocal. Keep the joints well lubricated with prepared cork grease. Wipe off the keys and wood with a chamois or soft cloth. Because of the way in which the holes are bored in the instrument, some of them tend to collect moisture. This can be blown out or swabbed out with a folded pipe cleaner. If moisture has collected under a pad, dry the pad with blotting paper or cigarette paper. The bocal may be cleaned by running warm water through it occasionally, and the small hole in it which is closed by the whisper key cleared with a straw.

Place the parts in the case carefully with the proper keys up. Figure 29 shows a typical arrangement of parts in the case. There is only one correct way in which the parts fit. Do not force the case closed. If it doesn't close easily, check the arrangement of parts in the case.

CARE OF THE BASSOON REED

1. Always soak the reed as directed before playing or adjusting.

2. Blow the reed free of moisture when finished playing and keep it in a reed case so that it will dry out slowly and completely to retain its proper form. If a plastic tube is used for reed storage, be sure that there are holes in each end for proper air circulation, otherwise the reed will not dry properly.

3. Clean the inside of the reed every week or ten days with a wet pipe cleaner when the reed is well soaked. Insert the pipe cleaner from the round end and force it gently through the tip of the reed. Then pull it through the reed slowly moving it from side to side so that all inside surfaces are cleaned. Repeat the process two or three times.

4. Keep the outside surfaces of the blades clean so that vibration is not restricted. A light polishing with Dutch Rush will clean the surface.

5. Keep fingers off the tip of the reed.

TUNING AND INTONATION

The bassoon is a nontransposing instrument, i.e., A played on the bassoon sounds A on the piano, the music sounding exactly as written. A-440 is the standard tuning note for orchestra, with the bassoon tuning an octave lower by playing A top line of the bass clef which sounds A-220. Learning to hear a perfect octave requires some practice, but facility is easily acquired. Bands frequently use B-flat as the standard tuning note, since this is a better tuning note for the brass instruments. For accuracy the tuning note should be sounded by a tuning fork, tuning bar, or electronic tuner, or checked with an electronic aid. Tune with the piano if playing with one, or if no other comparison source is available. Even with regular tuning, pitch on a piano fluctuates and is not the best source for a tuning note.

In the very beginning stages of learning to play, tuning and intonation present some difficulties. However as the embouchure develops and technical facility is increased, more and more attention must be given to intonation and tuning. An electronic aid such as a stroboscope is invaluable.

On the bassoon, it is not the instrument itself which is tuned, but the reed. Correct tuning is part of the process of making a bassoon reed, and every player who makes his own has an A-440 or A-220 tuning fork for this purpose. Correct pitch is determined by the length of the reed and by the way in which the lay is cut.

Earlier it has been suggested that the beginning bassoonist use reeds made by a professional player. If reeds are being ordered for a particular instrument, the brand and model of the instrument being used should be indicated, along with the information that the reed is for a beginning player. Then the reed can be made to fit its use.

If the reed being used is sharp or flat it can frequently be adjusted to the correct pitch. Seek the assistance of your instructor or a fellow student who is majoring on the bassoon. The author's *Guide to Teaching Woodwinds* gives detailed instructions on reed adjustment.

Very slight adjustments in pitch can be made by adjusting the distance the bocal is inserted into the end of the instrument. Pulling the bocal out will flatten the overall pitch, pushing it in will sharpen the overall pitch. However this must be done in such a way that the small hole in the bocal can be closed by the pad of the whisper key.

Larger adjustments in pitch on the bassoon are made by changing bocals. Most instruments are supplied with two bocals of different lengths. The longer bocal will be flatter in pitch than the shorter one. Experiment with both bocals to determine the one best suited for your playing.

If the reed itself is good, once it and the instrument are accurately tuned to the standard pitch, the remainder of the intonation on the instrument is dependent on the player. Intonation is controlled primarily by the embouchure with the assistance of breath support. Good intonation is the product of careful and continuous attention.

FLUTE FINGERING CHART

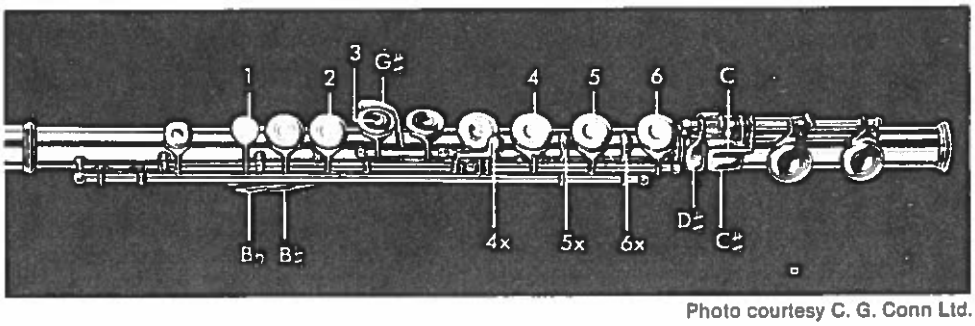


Photo courtesy C. G. Conn Ltd.

x—indicates keys operated by fingers normally covering holes. When these keys are used the hole operated by that finger remains open.

The D-sharp key is down on all notes except Low C, C-sharp, the two D-naturals, and the highest B-flat, B-natural, and C.

T—Left thumb on either lever except where indicated otherwise. Normal position is on the B-natural lever.

Fingerings are numbered and referred to in the text over notes to indicate special usage.

			Left Hand	Right Hand
C		1.	T 123	456 C
C♯		2.	T 123	456 C♯
D		3.	T 123	456
D♯		4.	T 123	456 D♯
E		5.	T 123	450 D♯
F		6.	T 123	400 D♯
F♯		7. 8.	T 123 T 123	006 D♯ 050 D♯
G		9.	T 123	000 D♯

			Left Hand	Right Hand
G♯		10.	T 123 G♯	000 D♯
A		11.	T 120	000 D♯
A♯		12. 13. 14.	T 100 TB♭ 100 T 100	400 D♯ 000 D♯ 4X00 D♯
B		15.	TB 100	000 D♯
C		16. 17.	100 (T) 123	000 D♯ 456 C
C♯		18. 19. 20.	000 123 T 023	000 D♯ 456 C♯ 456 C♯
D		21. 22.	T 023 (TB) 100	456 05X0 D♯
D♯		23. 24.	T 023 (T) 100	456 D♯ 006X D♯

		Left Hand	Right Hand
E	25.	T 123	450 D♯
F	26.	T 123	400 D♯
F♯	27. 28.	T 123 T 123	006 D♯ 050 D♯
G	29.	T 123	000 D♯
G♯	30.	T 123 G♯	000 D♯
A	31.	T 120	000 D♯
A♯	32. 33. 34.	T 100 TB♭ 100 T 100	400 D♯ 000 D♯ 4X00 D♯
B	35.	TB 100	000 D♯
C	36. 37.	100 T 023	000 D♯ 450 D♯
C♯	38. 39. 40.	000 T 023 003	000 D♯ 05(6) D♯ 456 D♯
D	41. 42.	T 023 T 123	000 D♯ 000 D♯

		Left Hand	Right Hand
D♯	43. 44. 45.	T 123 G♯ T (1)23 T (1)23 G♯	456 D♯ 456 D♯ 05x0 D♯
E	46. 47. 48.	T 120 T 120 T 103	450 D♯ 456x D♯ 456 D♯
F	49. 50. 51.	T 103 T 103 TB 000	400 D♯ or C♯ 406 D♯ 000 D♯
F♯	52. 53. 54.	TB 103 TB 103 T 123	006 (C♯) 050 D♯ 400 D♯
G	55. 56.	123 T 023	000 D♯ 456 D♯
G♯	57. 58. 59.	023 G♯ 023 G♯ T 023 G♯	000 D♯ 056 D♯ 450 D♯
A	60. 61. 62.	T 020 (G♯) T 020 T 103	400 (D♯) 406 C♯ 45x6x D♯
A♯	63. 64. 65.	T 000 T 000 TB 103	45x0 (D♯) 406x (D♯) 05x6
B	66. 67.	TB 103 TB 103	006x (D♯) 05x6x D♯ or C
C	68. 69. 70. 71. 72.	123 G♯ (T) 123 G♯ 123 123 (G♯) 123 G♯	400 (C) 406 C 45x6 (C) 406x (C) 456

OBOE FINGERING CHART

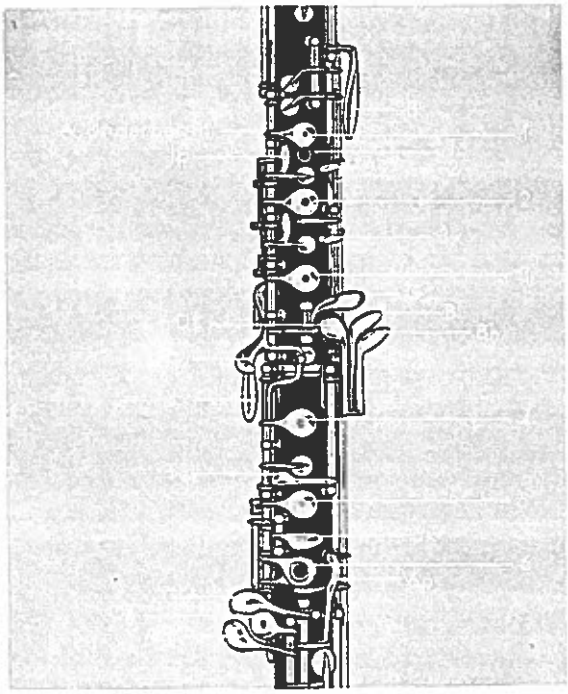
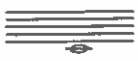


Photo courtesy C. G. Conn Ltd.

( )—Keys in parenthesis indicate its use in that fingering is optional, depending on intonation and resonance on a particular instrument.

x, y—indicate keys operated by fingers normally covering holes. When these keys are used the hole operated by that finger remains open.

Fingerings are numbered and referred to in the text under notes to indicate special usage.

			Left Hand	Right Hand
B♭		1.	123 B♭	456 C
B		2.	123 B	456 C
C		3.	123	456 C
C♯		4.	123	456 C♯
D		5.	123	456
D♯		6. 7.	123 123 D♯	456 D♯ 456
E		8.	123	450

			Left Hand	Right Hand
F		9. 10.	123 123 (D♯)	456x 406 (D♯)
F♯		11.	123	400
G		12.	123	000
G♯		13. 14.	123 C♯ 123	000 4x00
A		15.	120	000
A♯		16. 17. 18.	120 103 G♯ 103	400 000 4x00
B		19. 20. 21. 22.	100 11p00 103 B♭ 120 B	000 400 456 C 456 C

		Left Hand	Right Hand
C	23.	100	400
	24.	020	000
	25.	103	456 C
	26.	½23	456 C
C♯	27.	½23	456 C♯
	28.	000	400
	29.	103	456 C♯
	30.	103x	000
D	31.	½23	456
	32.	100	45x0
	33.	12x0	400
D♯	34.	½23	456 D♯
	35.	½23 D♯	456
E	36.	A 123	450
F	37.	A 123	456x
	38.	A 123 (D♯)	406 (D♯)
F♯	39.	A 123	400
G	40.	A 123	000
G♯	41.	A 123 G♯	000
	42.	A 123	4x00
A	43.	B 120	000
A♯	44.	B 120	400
	45.	B 103	000

		Left Hand	Right Hand
B	46.	B 100	000
	47.	B 11p20	400
	48.	B 103	456 (D♯)
C	49.	B 100	400
	50.	023	450
	51.	B 020	400
	52.	B 103	406
C♯	53.	023	400 C
	54.	B 000	400
	55.	½23	400
	56.	B 003x	000
	57.	½23	406 C♯
D	58.	½23	000 (C)
	59.	023	000 (C)
	60.	B 100	45x0
	61.	B 12x0	400
D♯	62.	½23 B	056
	63.	½23 G♯	000 C
	64.	½23	4x00 (C)
E	65.	A ½23 G♯ D♯	056
	66.	A ½23 (B) ½20	4x56 D♯ 000
F	67.	A ½20 G♯ D♯	056
	68.	A ½20 (B)	4x56 D♯
	69.	A ½20 G♯	056 D♯
F♯	70.	A 120	456x (C)
	71.	A ½20	400 C
	72.	A 120	406
G	73.	A 103	400
	74.	A 11p00 (G♯)	400 C
	75.	A ½00 G♯ D♯	400 C
G♯	76.	A 103 B	056
	77.	A 100	400 (C)
	78.	A 103	006 C
A	79.	A 003 (B)	056 (D♯)
	80.	A 000	400
	81.	A ½03 G♯	006 D♯
	82.	A ½03 B	4x06

CLARINET FINGERING CHART

x,y,z—indicate keys operated by one of the fingers normally covering a hole. When they are used the hole is left open.

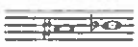
A, G-sharp operated by 1st finger; T—thumb hole, and R—Register key by left thumb; E, F, F-sharp, and G-sharp by little fingers.

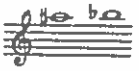
Fingerings are numbered and referred to in the text under notes to indicate special usage.

Photo courtesy C. G. Conn Ltd.

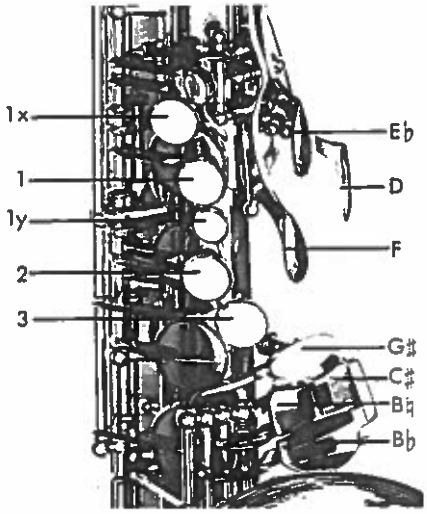
		Left Hand	Right Hand
E	1. 2.	T 123 E T 123	456 456 E
F	3. 4.	T 123 T 123 F	456 F 456
F♯	5. 6.	T 123 F♯ T 123	456 456 F♯
G	7.	T 123	456
G♯	8.	T 123	456 G♯
A	9.	T 123	450
A♯	10.	T 123	400

		Left Hand	Right Hand
B	11. 12.	T 123 T 123	050 406x
C	13.	T 123	000
C♯	14.	T 123 C♯	000
D	15.	T 120	000
D♯	16. 17. 18.	T 120 T 123x T 100	4x00 000 400
E	19.	T 100	000
F	20.	T 000	000

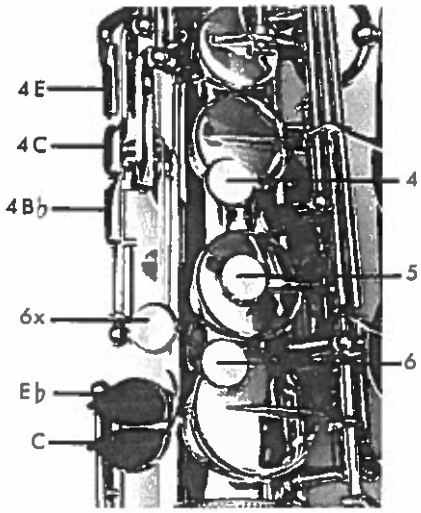
		Left Hand	Right Hand
F♯	 21. 22.	100 T 000	000 4xy00
G	 23.	000	000
G♯	 24.	G♯00	000
A	 25.	A 00	000
A♯	 26. 27.	RA 00 A 00	000 4z00
B	 28. 29.	TR 123 E TR 123	456 456 E
C	 30. 31.	TR 123 TR 123 F	456 F 456
C♯	 32. 33.	TR 123 F TR 123	456 456 F♯
D	 34.	TR 123	456
D♯	 35.	TR 123	456 G♯
E	 36.	TR 123	450
F	 37.	TR 123	400
F♯	 38. 39.	TR 123 TR 123	050 406x

		Left Hand	Right Hand
G	 40.	TR 123	000
G♯	 41.	TR 123 C♯	000
A	 42.	TR 120	000
A♯	 43. 44. 45.	TR 120 TR 123x TR 100	4x00 000 400
B	 46.	TR 100	000
C	 47.	TR 000	000
C♯	 48. 49.	TR 023 TR 000	450 4xy00
D	 50.	TR 023	400 G♯
D♯	 51. 52. 53.	TR 023 TR 023 TR 023	406x G♯ 006 G♯ 050 G♯
E	 54.	TR 023	000 G♯
F	 55. 56.	TR 023 C♯ TR 123 C♯	000 G♯ 456
F♯	 57. 58.	TR 020 TR 120	000 G♯ 456 G♯
G	 59. 60. 61.	TR 020 TR 100 TR 100	450 G♯ 450 G♯ 400 G♯

SAXOPHONE FINGERING CHART



Left Hand



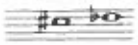
Right Hand

x, y—indicate keys operated by one of the fingers normally covering a hole. When they are used the hole is left open.

( )—Parenthesis indicate that use of that key is optional in that fingering, depending on intonation and resonance on a particular instrument.

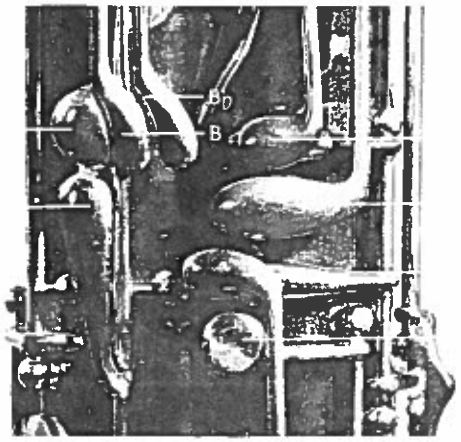
			Left Hand	Right Hand
B♭		1.	123 B♭	456 C
B		2.	123 B	456 C
C		3.	123	456 C
C♯		4.	123 C♯	456 C
D		5.	123	456
D♯		6.	123	456 E♭
E		7.	123	450

			Left Hand	Right Hand
F		8.	123	400
F♯		9. 10.	123 123	050 406x
G		11.	123	000
G♯		12.	123 G♯	000
A		13.	120	000
A♯		14. 15. 16. 17.	120 100 100 11y00	4B♭ 00 400 050 000
B		18.	100	000

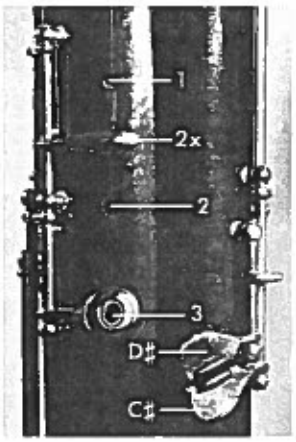
		Left Hand	Right Hand
C	 19. 20. 21.	020 100 T 123	000 4C00 456 C
C♯	 22. 23.	000 T 123 C♯	000 456 C
D	 24.	T 123	456
D♯	 25.	T 123	456 E♭
E	 26.	T 123	450
F	 27.	T 123	400
F♯	 28. 29.	T 123 T 123	050 406x
G	 30.	T 123	000
G♯	 31.	T 123 G♯	000

		Left Hand	Right Hand
A	 32.	T 120	000
A♯	 33. 34. 35. 36.	T 120 T 100 T 100 T 11y00	4B♭ 00 400 050 000
B	 37.	T 100	000
C	 38. 39.	T 020 T 100	000 4C00
C♯	 40.	T 000	000
D	 41.	T D000	000
D♯	 42.	T DE♭ 000	000
E	 43. 44. 45. 46.	T DE♭ 000 T 1x23 T F 000 T D 1x00	4E 000 000 000 000
F	 47. 48.	T DE♭F 000 T 1x20	4E 000 000

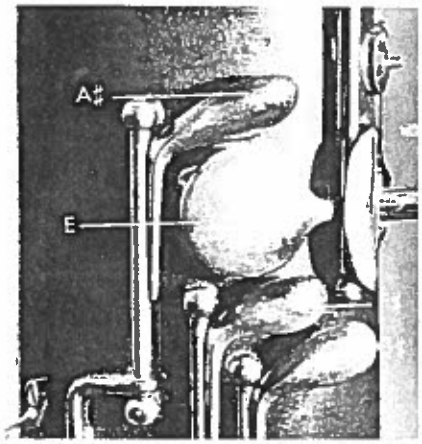
BASSOON FINGERING CHART



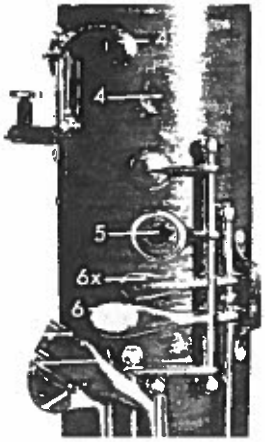
Left Thumb



Left Hand



Right Thumb



Right Hand

x—indicates key operated by one of the fingers normally covering a hole. When they are used the hole is left open.

( )—Parenthesis indicate that use of that key is optional in that fingering, depending on intonation and resonance on a particular instrument.

Fingerings are numbered and referred to in the text under notes to indicate special usage.

		Left Thumb	Left Fingers	Right Thumb	Right Fingers
B♭	1.	B B♭	123	E	456 F
B	2.	B	123	E	456 F
C	3.	C	123	E	456 F

		Left Thumb	Left Fingers	Right Thumb	Right Fingers
C♯	4.	C	123 C♯	E	456 F
D	5.	D	123	E	456 F
D♯	6.	D	123 D♯	E	456 F

		Left Thumb	Left Fingers	Right Thumb	Right Fingers
E	7.		123	E	456 F
F	8.	W	123		456 F
F♯	9. 10.	W W	123 123	F♯	456 456 F♯
G	11.	W	123		456
G♯	12. 13.	W W	123 123	G♯	456 G♯ 456
A	14.	W	123		450
A♯	15. 16.	W W	123 123	A♯	450 456x
B	17.	W	123		400
C	18.	W	123		000
C♯	19. 20.	(Dc♯ W) (W)	123 123	E	000 4x00 F
D	21.	W	120		000
D♯	22. 23. 24. 25.	W Wc♯ W W	103 (D♯) 120 103 103 C♯	A♯	000 000 0(5)0 000
E	26.	W	100		000

		Left Thumb	Left Fingers	Right Thumb	Right Fingers
F	27.	W	000		000
F♯	28. 29.	(W) (W)	½23 ½23	F♯	456 456 F♯
G	30.	(W)	½23		456
G♯	31. 32.	(W) (W)	½23 ½23	G♯	456 G♯ 456
A	33.		123		450
A♯	34. 35.		123 123	A♯	450 456x
B	36.		123		400
C	37.		123		000
C♯	38. 39. 40.	C♯ C♯ D	123 123 123	A♯	056 F 000 050 F♯
D	41. 42.		120 120		000 056 F
D♯	43. 44. 45. 46.	C♯	120 120 120 103 D♯		(4)56 000 0(5)6 000
E	47. 48.		103 D♯ 100 (D♯)		(4)56 000
F	49. 50. 51.		103 (D♯) 023 (D♯) 100		450 450 450

		Left Thumb	Left Fingers	Right Thumb	Right Fingers
F♯	 52. 53. 54.	W	½23 (D♯) 103 (D♯) 02(3) D♯	A♯ A♯	400 450 450
G	 55. 56. 57.	W W W	½23 (D♯) ½23 (D♯) ½23 D♯	A♯	400 F 000 G♯ 400
G♯	 58. 59.	W	½23 (D♯) ½23 (D♯)	A♯	006 000 F
A	 60. 61.	a c♯ ac♯	123 (D♯) 123 (D♯)		006 000 F

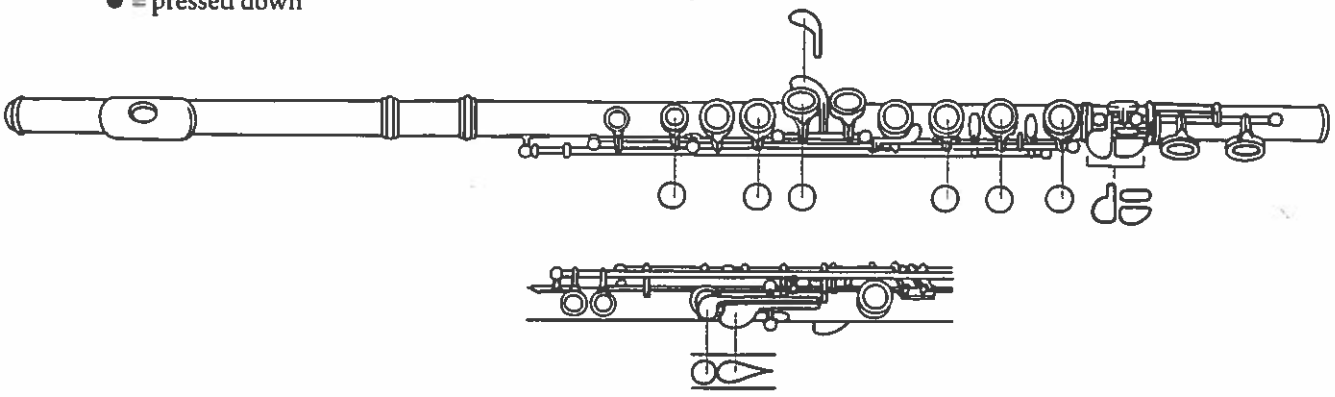
		Left Thumb	Left Fingers	Right Thumb	Right Fingers
A♯	 62. 63.	a c♯ Wc♯	123 (D♯) 123 D♯		450 F 050 F
B	 64.	b	120 (D♯)	A♯	450 F
C	 65.	b	100 (D♯)	A♯	450 F

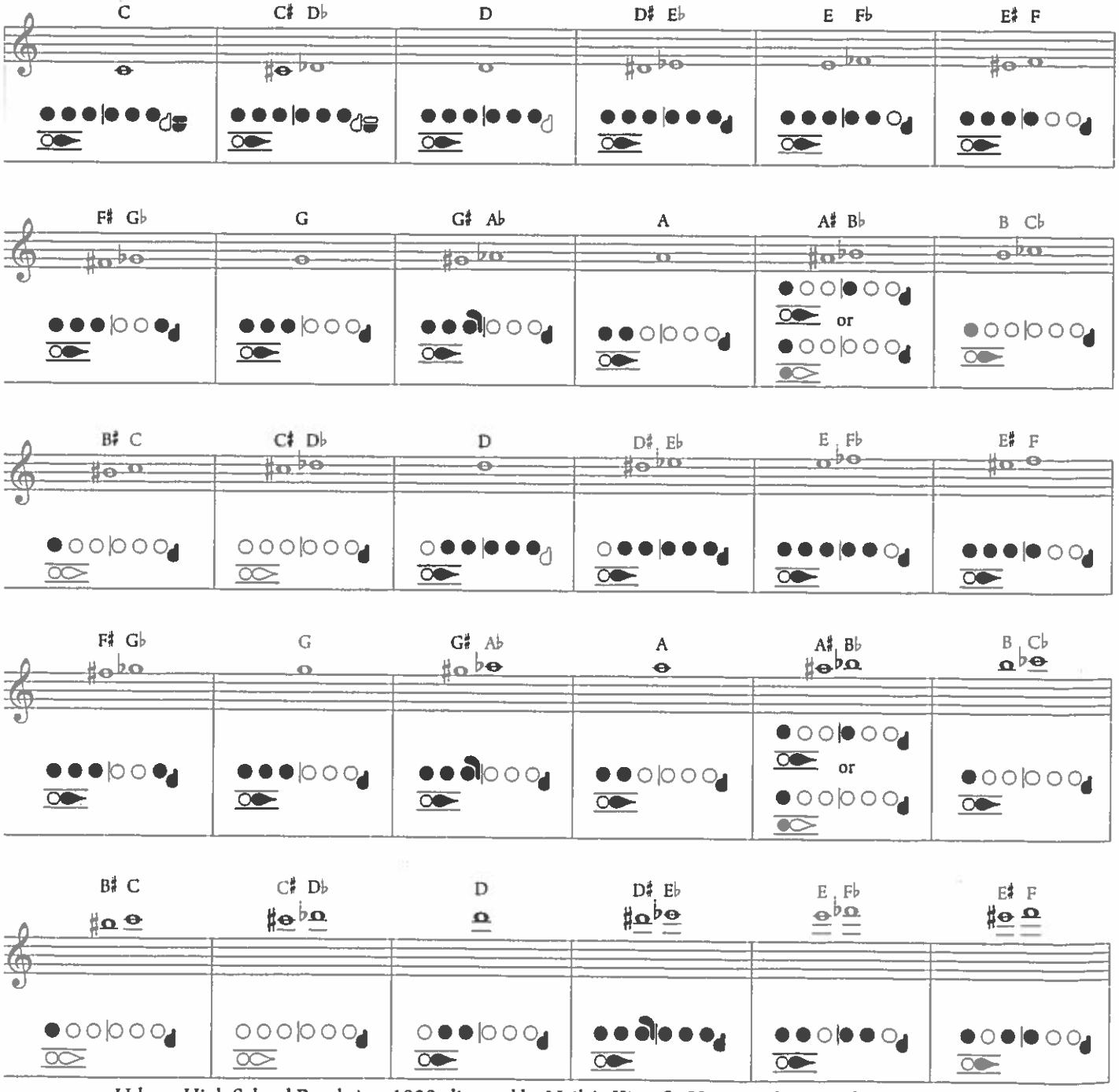
Flute Fingering Chart

○ = open

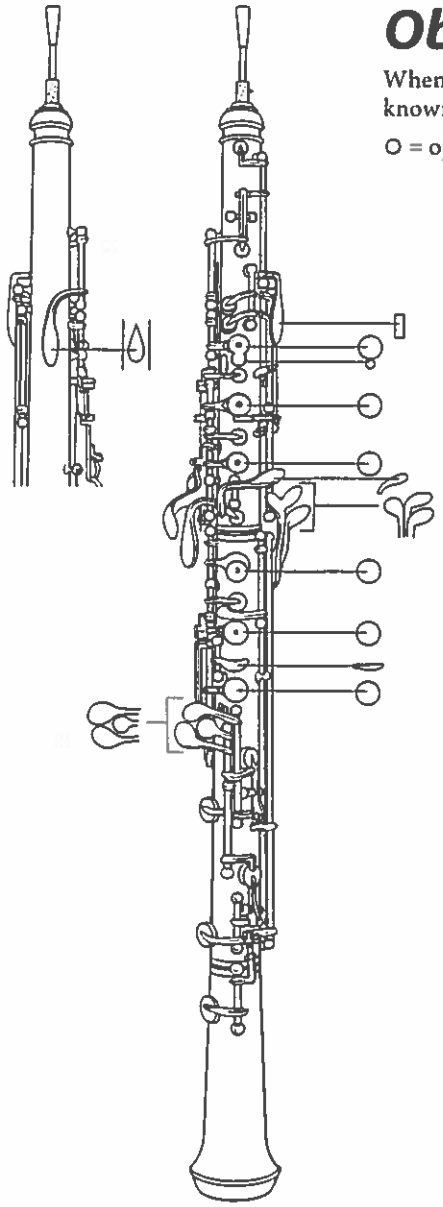
● = pressed down

When more than one fingering is shown, the first is the most commonly used. The additional fingerings, known as **alternate fingerings,** are used in certain situations to allow for better technique.





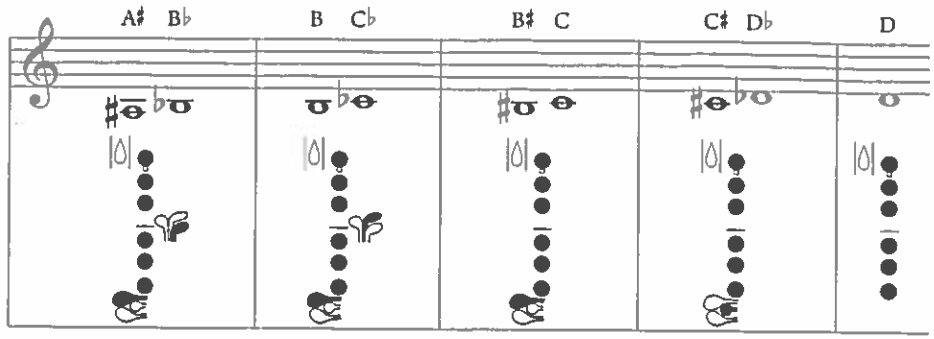
Urbana High School Band circa 1930, directed by Neil A. Kjos, Sr. Historic photograph courtesy of Urbana High School, Urbana, Illinois.

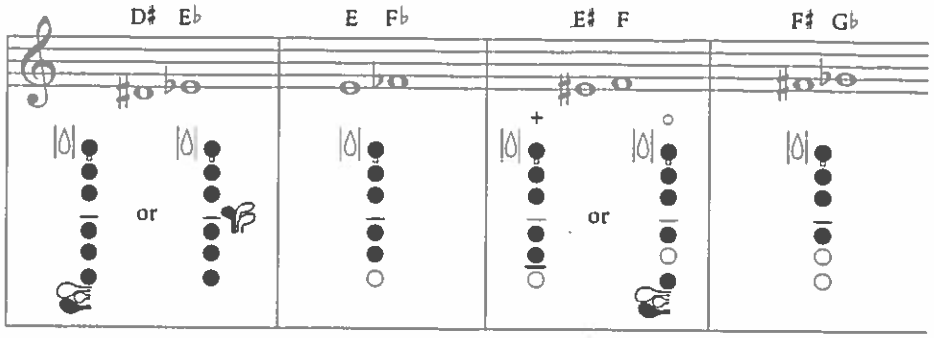


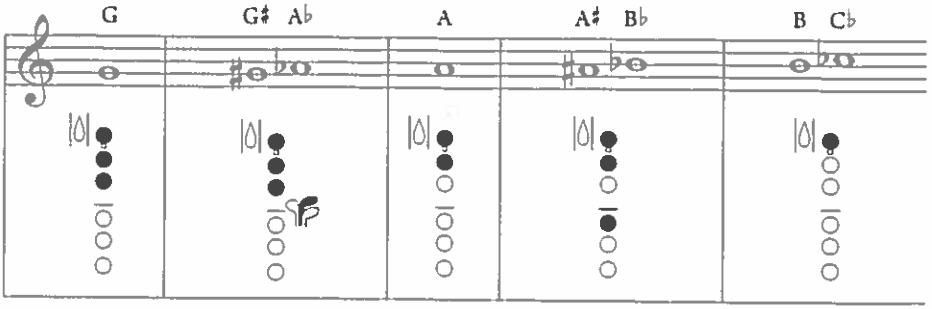
Oboe Fingering Chart

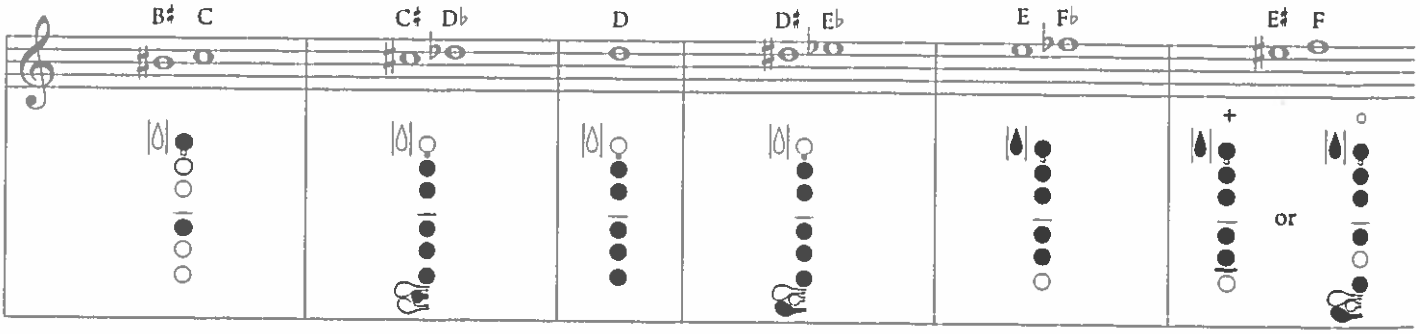
When more than one fingering is shown, the first is the most commonly used. Additional fingerings known as **alternate fingerings**, are used in certain situations to allow for better technique.

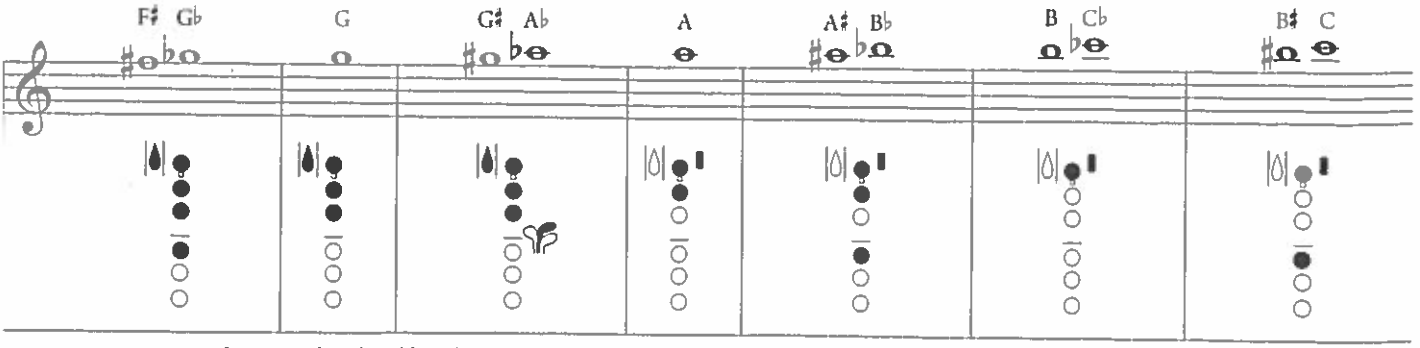
○ = open ● = pressed down ⚲ h.h. = half hole ○ = forked fingering + = right hand fingering





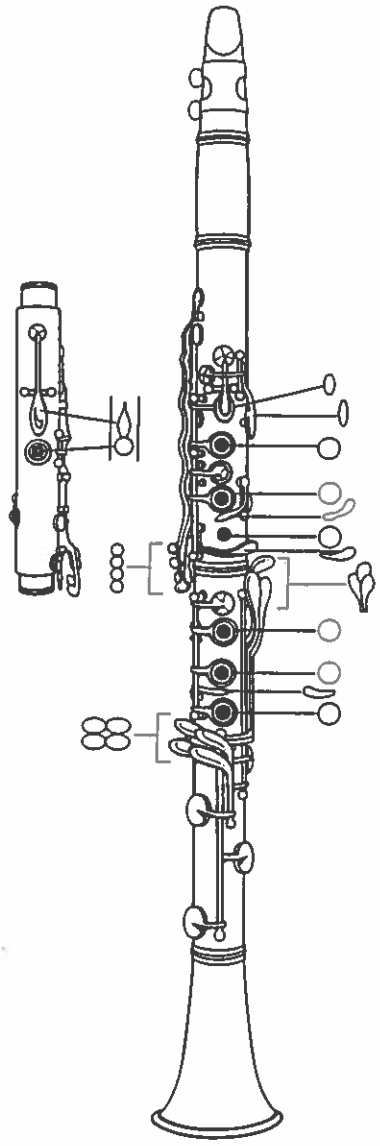






Urbana High School band circa 1930, directed by Neil A. Kjos, Sr. Historic photograph courtesy of Urbana High School, Urbana, Illinois. Instrument provided courtesy of Conn-Selmer

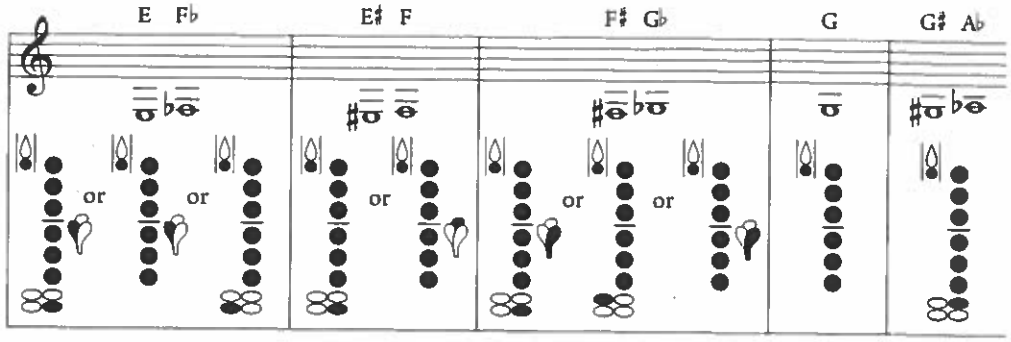
B♭ Clarinet Fingering Chart

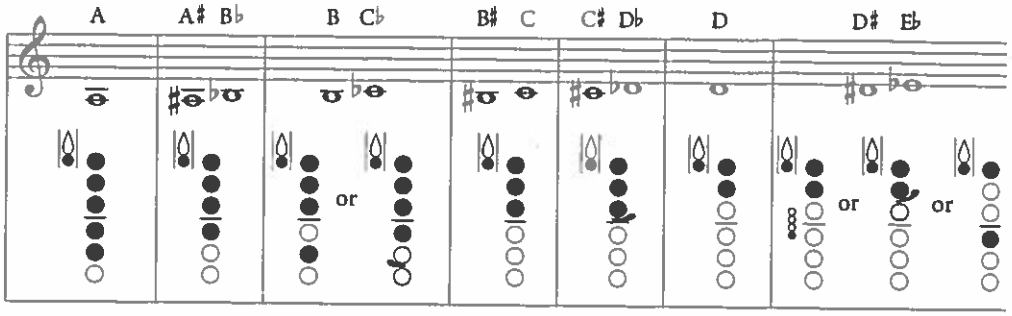


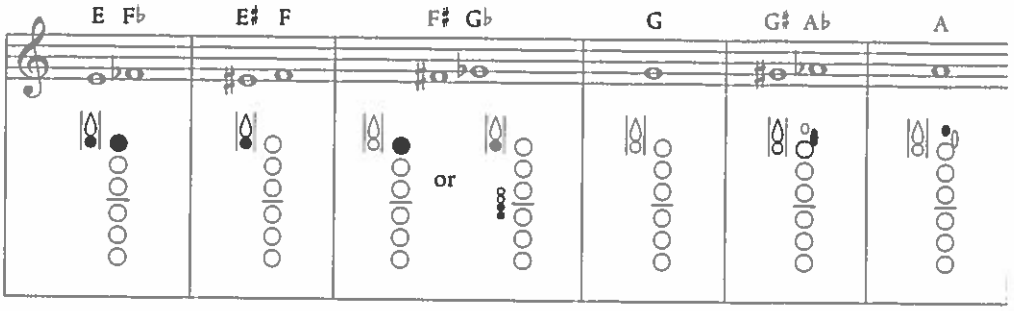
○ = open

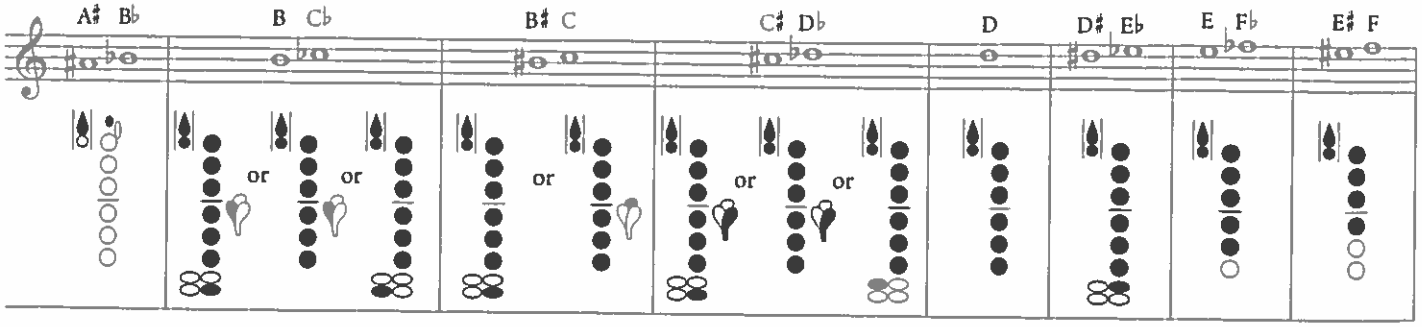
● = pressed down

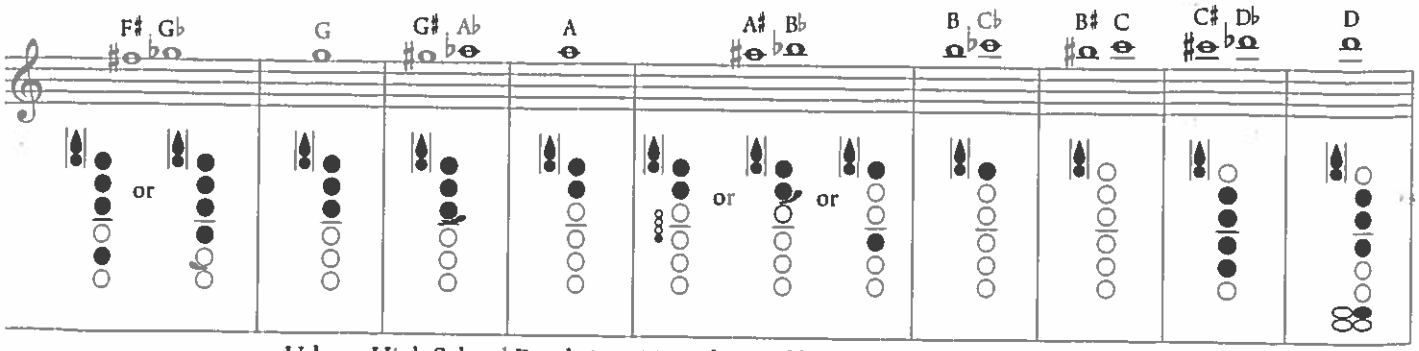
When more than one fingering is shown, the first is the most commonly used. The additional fingerings, known as **alternate fingerings**, are used in certain situations to allow for better technique.











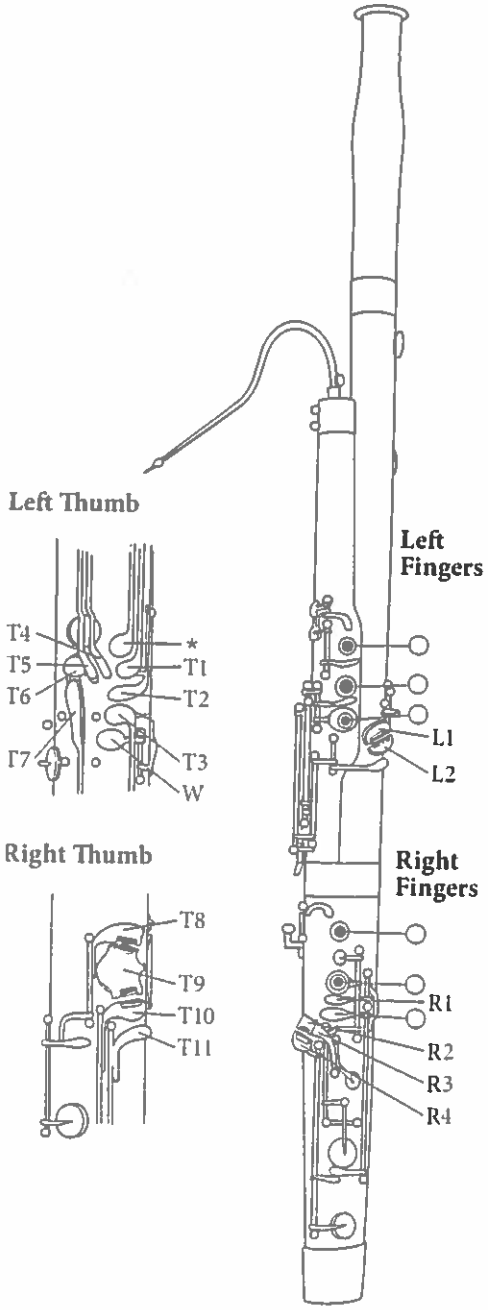
Urbana High School Band circa 1930, directed by Neil A. Kjos, Sr. Historic photograph courtesy of Urbana High School, Urbana, Illinois.

V61CL

Bassoon Fingering Chart

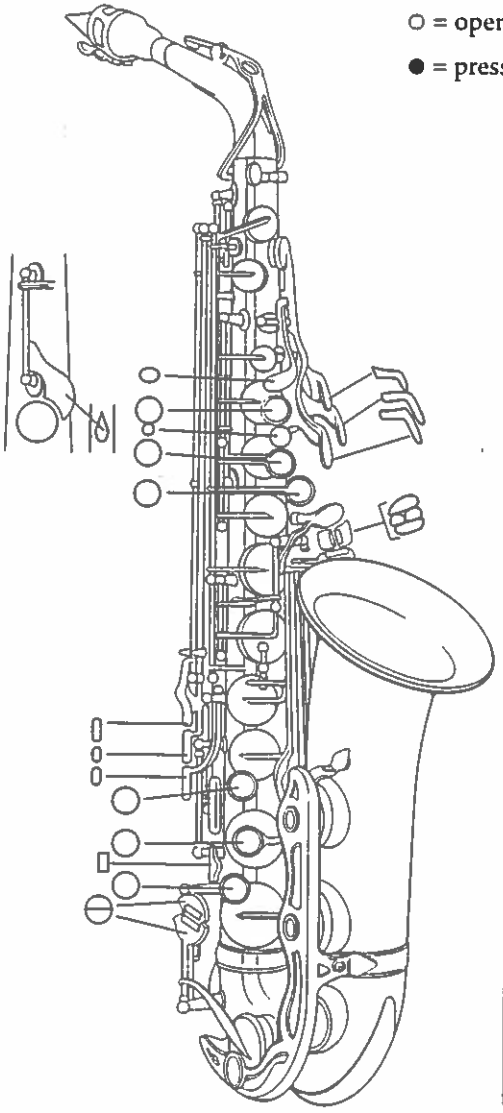
○ = open
● = pressed down
W = whisper key
h.h. = half hole
T = thumb key
L = left finger key
R = right finger key

When more than one fingering is shown, the first is the most commonly used. The additional fingerings, known as alternate fingerings, are used in certain situations to allow for better technique.



Historic band photograph courtesy of Urbana High School, Urbana, Illinois. Instrument provided courtesy of Conn-Selmer

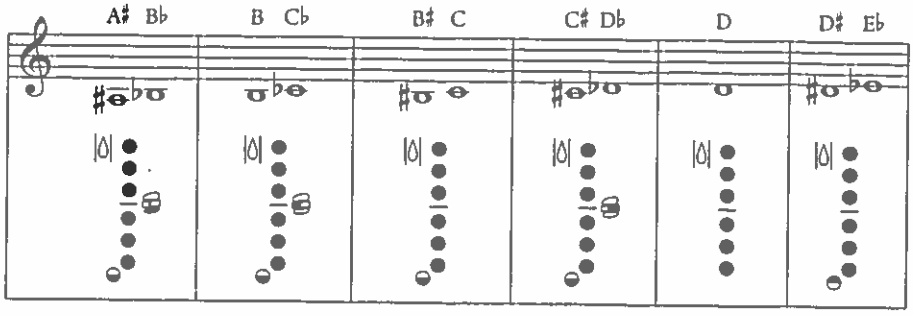
E♭ Alto Saxophone Fingering Chart

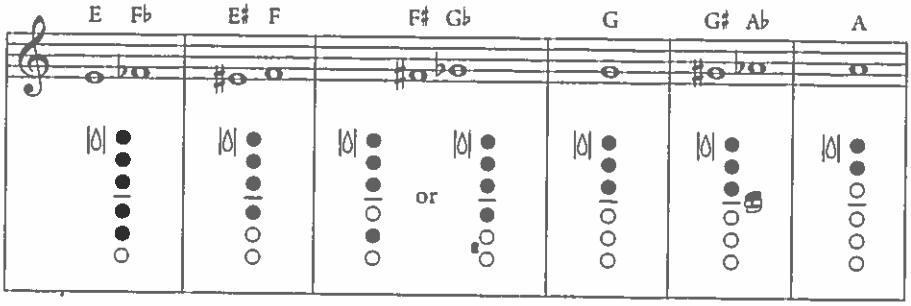


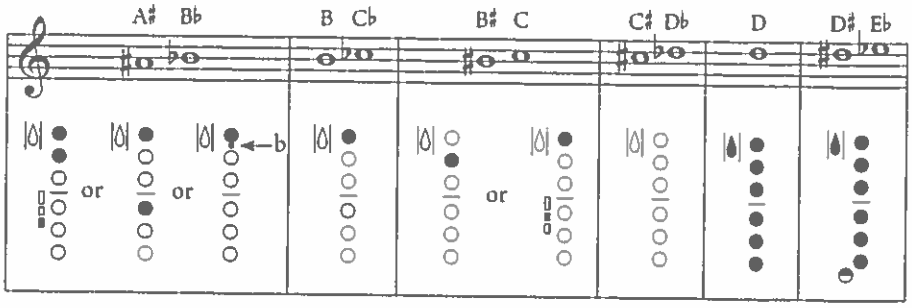
○ = open

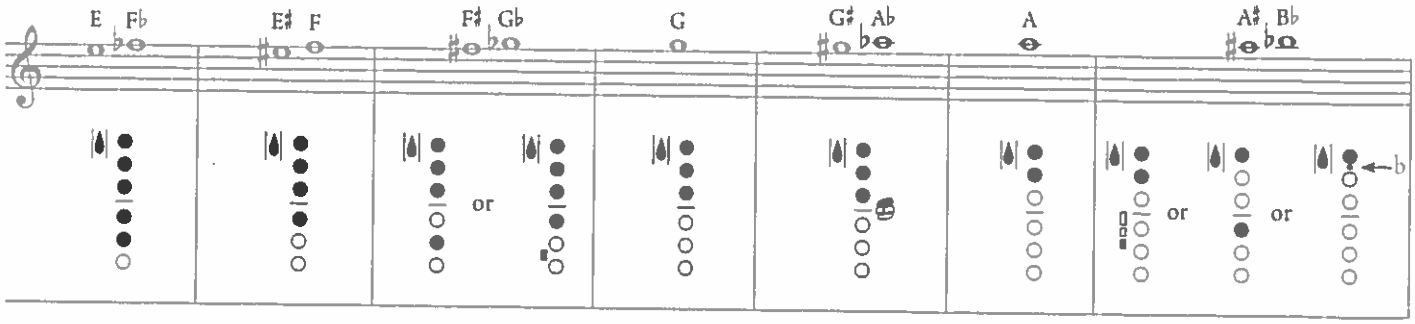
● = pressed down

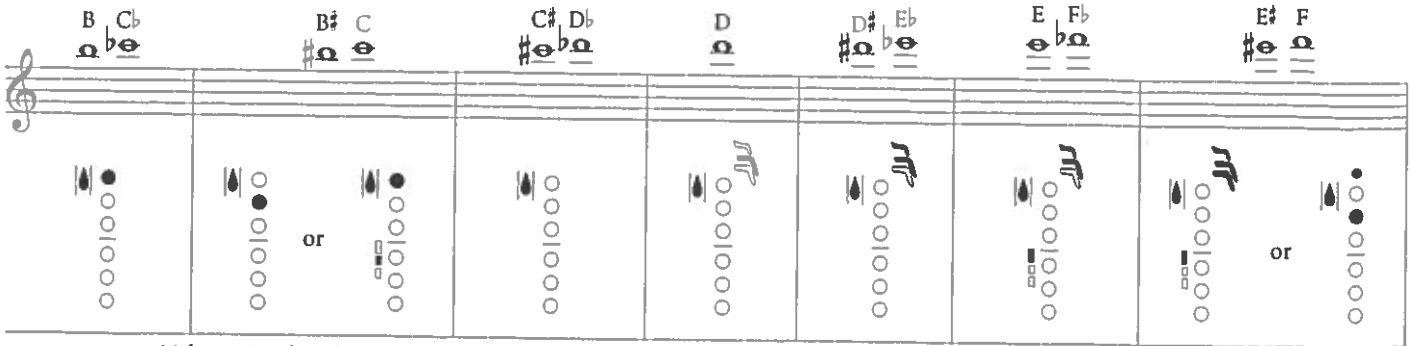
When more than one fingering is shown, the first is the most commonly used. The additional fingerings, known as **alternate fingerings**, are used in certain situations to allow for better technique.











Urbana High School Band circa 1930, directed by Neil A. Kjos, Sr. Historic photograph courtesy of Urbana High School, Urbana, Illinois. Instrument provided courtesy of Conn-Selmer.

W61XE

Applied Woodwind Techniques

Compiled by John Mastroianni

With sincerest thanks to Mark Buonfiglio, Liz DiDomenico, Kim Collins, Marilyn Krentzman, Claire McCarthy, Walter Mamlok, and Becky Noreen

TIPS FOR STARTING BEGINNER FLUTISTS

1. BEGIN WITH HEAD JOINT ONLY (be sure to check cork for proper placement and adjust as needed.)
   - Student holds head joint with thumbs and index fingers of each hand.

- Center the embouchure hole by rubbing it gently back and forth and looking in a mirror: **Don't use the "roll it in, then roll it down" method as it places edge of embouchure hole too high on lip for most people.**

- Be sure the inside edge of the embouchure hole is placed on the spot where the skin changes from chin to lip. (Should be able to speak freely without the flute bouncing around because lip is FREE and not pinned down) There is a "dent" in the chin/lower jaw. This is a perfect place for the lip plate to go-adjust from there.

- Placement should naturally have lip covering about 1/4 of embouchure hole. Hole should be parallel to the ceiling. (Flute Playing 101: cover less hole for lower notes and more for higher notes. "Coverage" is created by having a free bottom lip.)

- Start by asking the student to say MMMM and then Pooh. Ask them to try to begin the sounds like this at first in order to keep the lips in the proper shape and NOT in a smile-like "pulling" embouchure. Try small, short attacks at first. No "footballs."

- Add the tongue. Tongue moves HORIZONTALLY. Start with the tongue outside the lips, as if making a face. Pull the tongue back horizontally to release the air. Once mastered, place tongue on the top lip and draw back as if saying "thi" or "thuh." Do these attacks in a rhythmic pattern: X, X, X, rest etc.

- Move to holding notes out for two-four beats.

- Add octave slurs by blowing the low first, and adding right hand over end of head joint. Use RH index finger to play slide whistles and tunes-Mary Had a Little Lamb, etc.

2. MOVING ON TO THE FLUTE:
   - (Option: Leave footjoint off.) Grasp barrel with RH to help stabilize the flute and review attacks, tonguing, etc.

   - Add LH (while continuing to hold the barrel with RH for stability). L thumb should point up to ceiling and should be straight, not bent.

   Play typical B-A-G exercises, tunes, etc. Add octaves. (optional: Then add harmonics.) Add C. Skip around. After mastered, THEN introduce RH.

   - Add RH by placing fingers onto keys first and adding thumb AFTER placing fingers. (See later notes regarding thumb placement) Adjust footjoint for length of player's pinky finger.

Key Points to Cover: Teaching Flute in Band Class

Everything is pretty symbiotic; one thing done poorly can drastically affect another. This is a pretty big reason why young players often have poor intonation. Careful attention to the basic points of playing can keep drastic intonation problems (and many other issues) at bay.

ALIGNMENT

- Embouchure hole aligned with first key (not necessarily with the lines the manufacturer printed on the barrel!).
- Embouchure hole and keys are held parallel to the ceiling.
- Foot joint should be adjusted to individual pinky length but generally the "bar" on foot joint is about at the middle of the D key
- The head joint should be pulled out about 1/4" from barrel. Needing to adjust drastically one way or another during tuning means there is some other key element missing in the playing (or head joint cork could be out of place).
- **For young students, making marks/dots with tape or nail polish on their flutes can help with consistent alignment.

HAND POSITION

- LH "as if reaching for something." Some students will bend wrist, others will hold it straighter. Flute rests on side of left index finger near crease where finger meets hand. Hand is turned toward flute slightly.
- LH thumb should be **facing up and down vertically** and straight, not bent.
- RH: Thumb should be placed on the flute in relation to how it hangs on hand naturally:
  a. Use "coke can test" to find relation of thumb to fingers.
  b. Note the thumb hangs naturally so that the pad of thumb is not flat to flute. So thumb is not placed on the flute with pad flat, as it will rotate entire hand to left! This will help avoid the "leaning fingers" syndrome.
  c. Thumb should be under body or even behind the curve of the body, not sticking out.
- RH pinkie slightly curved and slightly to the outside of the pad/nail.
- **For young students, placing a sticker or a Dr. Scholl's corn pad on the flute can help with placement of right and left hands consistently in the same place.

PLAYING POSTURE

One of the most commonly overlooked checkpoints. A flutist must play with upper body rotated and flute NOT parallel to shoulders. "Marching band" posture is a nightmare for flute players! An open posture can improve everything from sound to technique to intonation.

- If standing: stand one flute's distance from stand. Feet shoulder width apart. **Upper body is rotated to point head, nose and left elbow 45° to the left of center.**

Key Points to Cover: Teaching Flute in Band Class

(PLAYING POSTURE, CONTINUED:)

- If seated: ****Chair is aligned 45˚diagonally to music stand to allow upper body room for proper rotation.** In band situation, chairs should be set up so that chairs for stand partners are slightly facing one another, not lined up in a straight row.
- Helpful tool to find a more open posture: Stand against wall with shoulder blades touching. Push flute away from body with right arm and rotate head to left so that elbow is not pushing into the wall.
- There should be open space under armpits, and between arms and body.
- Chin is up in a natural position
- Flute should hang just a little bit below parallel to floor.
- **Be sure flute is not hanging so that flute and lips are not parallel. If flute tilts down, head should tilt along with it.

EMBOUCHURE

- Proper placement of embouchure hole BELOW bottom lip.
- Hole is naturally covered (by nature of placement) about 1/4".
- Corners of lips generally should look "natural" or turned down a bit, not pulled back and smiling
- Symmetry: many players do not have a perfectly centered embouchure, some due to tear drop lips, etc. This is OK. If teardrop is significant, try moving off-center to the left or right but to the left is usually better.

TONGUING

- Tongue and lips are extremely symbiotic. Tonguing far back in mouth causes lips to pull back tighter. Tonguing forward (just behind teeth) helps support the flexible embouchure. Tonguing with a slightly "flat" tongue (laminal consonant rather than apical) can be even further supportive to a great embouchure.
- **Tonguing can drastically affect embouchure and intonation**

Common issues in school-aged flutists:

1. Tonguing/tongue position. Some students get away with not tonguing at all. Others get away with "tut" tonguing (ending the notes with the tongue rather than the air, especially when trying to play staccato). Tongue should only be used to begin the notes.

2. Hand position, especially RH thumb/fingers. See handouts.

3. Not using RH pinky key for all notes except for D in and below the staff!!

4. Playing position. Marching band posture and lack of space in band rooms is deadly for flutists. See handouts.

5. Playing Eb/D in the staff with first finger down.

6. Playing upper octave with low octave fingerings

7. Using a tuner to fix issues that could be better fixed by simple changes in position/posture.

8. Using the "roll down" method of placing embouchure hole on lips.

9. Teaching kids that they need to blow hard for high notes and soft and relaxed for low notes. Along those lines, teaching kids to blow as if saying "Hoo" for low notes. Creates a huge aperture and not enough air pressure. Always use "birthday candle air" for all registers ("fffffffff")

Troubleshooting:

Players should play in as relaxed a way as possible.

If flutists need to move elbows or the flute around while changing to certain notes, hand position is poor.

Flutists with good hand and body position should be able to trill without having to realign the flute or shake the flute.

Flutists with smiling embouchures may be compensating for a flute placed much too high on lip.

Flutists who roll the flute in drastically may possibly have the flute placed too high on lip, and also faulty hand position.

Tear drop in top lip: move embouchure hole slightly to right or left.

Flutists who roll the flute out drastically may be compensating for faulty hand position or flute placed much too low under a very full lip.

Flute Tips

Remember, blow across the mouthpiece.

The stream of air used to create a sound on the flute should be produced from an *embouchure* approximately the size of a drinking straw. Imagine that someone has placed a drinking straw between your lips - this loosely indicates the size of the airstream.

Some suggestions to get you started

Try this with the headjoint only, at first.

1. Press your lips together. Roll the lips inward, so that there is no pink showing. (Imagine a woman who is pressing her lipstick between her lips)
2. "Kiss your flute!" - place the *embouchure hole* completely against your pressed lips, so that you can feel the full circle around your mouth.
3. Unroll. Roll the flute away from your lips approximately 90 degrees, so that the *embouchure hole* is now level with the ceiling.
4. "Spit out a watermelon seed!" Imagine you have a small seed to spit out - this may assist you in finding a good *embouchure* shape. If you achieve a sound using this method, try adding a stream of air after your initial "spit".
5. Don't smile. Corners of your mouth down. Make a pouty face.

NO HAPPY FLUTE PLAYERS

☹

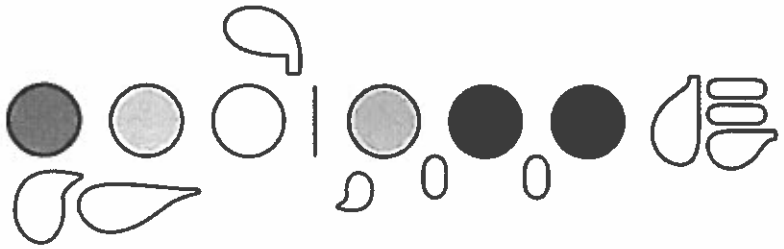
FLUTE

Flute Embouchure

- Start with headjoint only
- Have the kids hold the end of the flute where the cap is that leads to the cork and cover the open end with their right hand.
- Have students bring the headjoint to their bottom lip (under the lip) and start with a "pu" sound. Embouchure should be relaxed NO TIGHT CORNERS, do not smile and pull the lips back. I,
- Think of the word "perfect, or pure"
- If students are really struggling in a group setting have the students try the "kiss and roll down" technique so they can find their center. **But beware students will place the lip plate too high and it needs to be under the lip.**
    - Once students find their center have them try to place the headjoint down on their laps and then back up to their lip without the "kiss and roll down" and try to make a sound. Do this 10 times in a row and have students count how many times they were successful.
    - More headjoint games. Have students take their palm and cover and uncover the end of the headjoint so they can make different sounds. Have them turn the headjoint into a slide whistle and slide the right pointer finger in and out of the end of the headjoint. Or use the right index finger and play "Hot Cross Buns" on the headjoint by making a high, medium and low sound.
- Should students need extra help check out the pneumo pro (good to have a few on hand)
- Flute balance points, side of right hand thumb under the F key (NOT sticking out), right hand pinky, side of left hand third joint of pointer finger against the flute (some kids bump out this hand and don't make contact)
- . Never press the lip plate against the lip. You will get all sorts of weird posture from beginners because they are afraid they will drop it. Chin up, flute should NEVER rest on the shoulder. If student is too small they do make curved headjoints. **Position and posture is essential to all instruments, do not brush it aside for other things. Have kids check each other for position and posture.**
- Articulation, start this right away too on the headjoint. "Too, too" tip of the tongue hits the back of the top teeth, not thru the teeth.
    - Have the kids say out loud, "too, too" Make up a rhythmic pattern using "too, too." Kids echo out loud. Then have kids echo "too, too" without saying "too, too" More like whispering. The kids are blowing air and your listening for that articulation. Transfer it onto the headjoint.
- Have kids echo you on the headjoint. Sometimes it takes weeks to get the kids

articulating but please keep harping on it because after a year it's really hard to break a bad habit.

- I start with B, A, G (Hot Cross Buns, Mary Had a Little Lamb)
- Then add B-flat (Cold Cross Buns, Mark Lost her Lamb)
- Then add D, C (Wow this is tricky for beginners. Some kids this is the breaking point)
- Make games out of who can switch to D, C the fastest. Have kids write a little song switching from D, to C. Have students take turns and echo each other from D to C. Once they get this down sky is the limit.
- Then you could follow the traditional method book.
- I have made color coded fingering charts and placed stickers on flutes so the kids know where the place their fingers.



- Have students "shoulder flute". Flute headjoint against the left shoulder and foot joint goes on right thigh. Students place fingers down and move finger so they get used to switching keys.
- **Flute tone.** Long tones, long tones, long tones and more long tones. Work on switching octaves and changing the air speed.
- Breath support. The kids **WILL** get dizzy and light headed. They need to listen to their own bodies and stop when they get to this point. You don't need kids passing out. I have kids bring water to class and take a break when needed. Do breathing exercises. Have the kids track how long they can sustain a sound on the flute by timing them and write down the seconds and see if can last another second or two the following week.

SAXOPHONE

- Step one is opening the case (really!) Students will open the case upside down if you do not show them how do this correctly.

- Step two is to show the students how to handle the reed, avoiding touching the tip. Often, small children do not have great dexterity and will break reeds easily if they are not taught to be careful. Have the students put the reeds in their mouths to wet them. (This has a bonus value in that it prevents them from talking while you are teaching them to assemble the instruments.)

- Step three is to have them take out the neck and put on cork grease. New instruments will need to be greased every time for a while. The students will think the mouthpiece goes all the way on so you will need to show them how far to push the mouthpiece onto the cork.

- Step four is to show the students how to place their reeds on the mouthpieces. The best method is to place the ligature on and slide the reed between the mouthpiece and ligature. The students will try to put the reeds on at any angle you can imagine-- upside down, backwards, etc. so this is obviously important.

- The next step is to have them make their first sounds. Before blowing on their instruments, I have the students blow into a straw. I do this on every instrument. It encourages them to not puff out their cheeks. Try it--- it is almost impossible to puff your cheeks out. Additionally, this results in a faster air stream which translates into a better tone.

- Next, have them make sounds on the neck with the reed in place. You will need to work to make sure they do not have too much or too little mouthpiece in their mouths. Here is a link https://www.youtube.com/watch?v= tqscMAp7Ik. You will really need to use your ear to help the students find the right spot. Model the correct an incorrect amounts and ask the students which sounds better.

- Have the students echo rhythmic patterns. Teach them to use their tongues right away. "Tip of the tongue at the tip of the reed."

- Next, the students will need to learn to use the neck straps. It is a good idea for them to get padded straps (not part of the beginner sax). The straps they come with are very uncomfortable for 9 and 10 year olds.

- Before they start to play, I always put a small piece of tape on the three keys they will need for Hot Cross Buns. This is just so they know what to press when they get home. Do not use stickers as they are hard to remove and the students will want to leave them on. I tell the students as soon as they know which keys to use, take the tape off.

- They will next need to learn how to hold the sax. Have the students make their hands into the shape of a "C". Show them the keys they will hit if they are not careful (palm keys and right side keys). This can be a major challenge for small hands-- especially if your students are 4th graders. It is critical that they learn to self diagnose as they will only be with you for 30 minutes each week.

- Start with the note "b". Play long notes watching for habits. Echo rhythmic patterns.

- Proceed to "a" and "g".

- Teach them "Hot Cross Buns"-- no music yet-- just by rote.
- This should be their "homework" for the first week.

CLARINET

- Fasten your seat belts. Starting clarinet is very tough in the beginning. Believe it or not, in most cases, it will take your students the entire first lesson to learn to assemble their instruments.
- One tactic that can be helpful is to have older students come to that first lesson. Have one older child for each beginner. They can guide the students through the steps that you provide.
- Here is a good link on assembling the clarinet.
  https://www.youtube.com/watch?v=fLkz2wLf6_0&t=279s
- Show the students how to handle the reed, avoiding touching the tip. Often, small children do not have great dexterity and will break reeds easily if they are not taught to be careful. Have the students put the reeds in their mouths to wet them. (This has a bonus value in that it prevents them from talking while you are teaching them to assemble the instruments.)
- Before blowing on their instruments, I have the students blow into a straw. I do this on every instrument. It encourages them to not puff out their cheeks. Try it--- it is almost impossible to puff your cheeks out. Additionally, this results in a faster air stream which translates into a better tone.
- Once the clarinet is assembled, have the students remove the barrel and mouthpiece. Have the students make their first sounds with these while holding on with their left hands. This encourages "left hand on top".
- You will need to work to make sure they do not have too much or too little mouthpiece in their mouths.
  Here is a link to a decent video on this
  https://www.youtube.com/watch?v=TEIxSabJ67c
  You will really need to use your ear to help the students find the right spot. Model the correct an incorrect amounts and ask the students which sounds better.
- Have the students echo rhythmic patterns. Teach them to use their tongues right away. "Tip of the tongue at the tip of the reed."
- They will next need to learn how to hold the clarinet. Make sure they have their right thumb rests partly on their nails on the bottom of the clarinets. Have the students make their hands into the shape of a "C". Show them the keys they will hit if they are not careful (left g sharp key and right side keys). Covering the holes is a big challenge on clarinet. Have the students play in front of a mirror to help them see what they are doing. It is critical that they learn to self diagnose as they will only be with you for 30

minutes each week.

- Start with the note "e". Play long notes watching for habits. Echo rhythmic patterns.
- Proceed to "d" and "c".
- Teach them "Hot Cross Buns"-- no music yet-- just by rote.
- This should be their "homework" for the first week.

Double Reed Embrochures

Oboe

1) Soak reed
2) Lips perched as though you're whistling. If you can't whistle, imitate an Owl by saying "Who". In both cases, lips are together, in front of your teeth. Your chin is flat.
3) Invert the whistle, lips come in towards teeth and begin to cover your teeth.
4) "C" to "C". Put your lips (soft fleshy area) on the thread of the reed and blow. The note "C" sounds. Then put your lips (soft fleshy area) on the reed. The "C" should sound. Do this exercise until both notes sound "C".
5) Once that occurs, add the reed to the instrument, press the first key of both upper hand and lower hand, blow on thee reed, and the note "C" will sound. ☺ Enjoy playing your oboe

Bassoon

1) Soak reed
2) Hide a yawn. Your jaw drops and your lips create a round shape
3) Perch your lips to whistle a low note.
4) Place the reed on your lips to almost the first wire
5) Blow in reed. Should get a low "crow" or "caw" sound. It's kind of ugly. If you get no sound, there is not enough pressure on the reed. If your lips are too tight, you'll create a high sound, relax a bit. ☺ enjoy bassooning ☺

Oboe and Bassoon Pedagogy
Presented by John Mastroianni

Oboe

- Instrument must be in optimum playing condition
- Good reeds are crucial (Jones reeds, Roger Miller reeds)
- "Peep" before you play
- Breathe, prepare, play
- Embouchure should be forward and down
- Oboe study should begin with the lower register pitches B, A, G, F#, E, D, and C.
- Breeze Easy Volume 1 is an excellent starting book. It introduces accidentals logically and progressively. Then move to Breeze Easy Volume 2, followed by the *Rubank Intermediate Method for Oboe.*
- For students switching to oboe from another instrument, *The Beginning Oboist* by Valerie Anderson is an excellent resource. It is recommended that students be at least in 7th grade to use this text.
- *Standard of Excellence* and *Accent on Achievement* are not the ideal choices of method books

Bassoon

- Always "crow" first! This prepares your embouchure to play
- Seat strap should be forward on the chair
- Bassoon should be up; not on a diagonal
- Pay special attention to the bocal when assembling the bassoon. It can bend very easily.
- Whisper key and the pancake key are used to play low
- Bassoon study should begin with the pitches, F, E, D, C, B, A, G and F.
- *Weissenborn* book method will take you right through high school and beyond. *Rubank* is also excellent.
- Please make certain that your students have ample time to swab and pack up
- Always stand the instrument straight up. Never lie it down. Water will get into the tone holes.

General Reed Care Tips

- Soak reeds for at least 5 minutes before playing.
- Use 320 or 400 grain sandpaper to balance a reed. Hold the reed up to the light and look for imperfections in the reed. Sandpaper is much easier to use than a reed knife.
- Store reeds in a case that is ventilated to avoid molding. **This is especially true for bassoon reeds!**

Double Reed Supply Companies

Jones Double Reed
303 E. Pacific Ave.
Spokane, WA 99202
They have great beginner videos on how to adjust reeds

Miller Double Reed
(800) 323-3216
www.millerdoublereed.com

Woodwind and Brasswind
(800) 348-5003
www.wwbw.com

OBOE/EH SUPPLIES

Hodgeproductsinc.com (Hodge Products) 1-434-361-1945

Reeds – all of these are easy to blow

Laura Karney - medium $21.00
*North Texas Deluxe Intermediate – medium soft $22.00
HB – medium $23.00

Reed Cases:
2 Reed Slimline Wood Oboe Reed Case - $12.50
3Reed Slimline Wood Oboe Reed Case – $20.00
3 Reed plastic oboe reed case - $14.00

Webreeds.com (Weber Reeds) 1-877-932-7332 or info@webreeds.com

Professional oboe reed "New Agave" Pro- $24.95 a little harder to blow

Eng. Horn "Sonoran Pro" $24.95

Bassoon Resources

The following resources may be very useful for aspiring instrumental music teachers.

Bassoon Supply Companies:

Jim sells Fox bassoons and is close enough to go and try out, he is also a repairperson
Jim Kirker
56 Davison St.
Hyde Park, MA
(617) 364-1346
http://www.kirkerbassoonrepair.com/index.html

Fox Products Corporation
PO Box 347
South Whitley, IN 46787
(260) 723-4888
www.foxproducts.com

Wicihita Band Instrument
2525 E. Douglas
Wichita, KS 67211
1(800) 835-3006
www.wichitaband.com

Woodwind and Brasswind
1 (800) 348-5003
www.wwbw.com

Frederic H. Weiner
http://shop.weinermusic.com/searchprods.asp

Miller Double Reed
800-323-3216
www.millerdoublereed.com

Charles Double Reed Comp.
65 Seavey Street
PO Box 2120
North Conway, NH 03860
www.charlesmusic.com

Forrests

1849 University Ave.
Berkeley, CA 94703
1(800) 322-6263
www.forrestsmusic.com

R. D. Gilbert
589 Larchmont, 2nd floor
Los Angeles, CA 90004
(323) 463-4930
www.rdgwoodwinds.com

Bassoon Reed Supply Companies:

Bel Canto Reeds
http://www.belcantoreeds.com/order_page.html

Arundo Reeds and Cane
18082 N.W. Dixie Mt. Rd.
North Plains, OR 97133
(503) 647-0958
http://home.earthlink.net/~arundo/

Jones Double Reed
303 E. Pacific Ave
Spokane, WA 99202
http://www.jonesdoublereed.com/basson-and-eh.html
Have good beginner videos on how to adjust reeds
https://www.youtube.com/watch?v=Ctqw5G_g6k8&list=PLUoJshubtlytYHuaCWt_HxaLe10vkiirW

Miller Double Reed
800-323-3216
www.millerdoublereed.com

Charles Double Reed Comp.
65 Seavey Street
PO Box 2120
North Conway, NH 03860
www.charlesmusic.com

Christlieb Products
3311 Scadlock Lane
Sherman Oaks, CA 91403
www.christliebproducts.com

Edmund Nielsen Woodwind Inst. Service
https://www.nielsen-woodwinds.com/en/

Forrests
1849 University Ave.
Berkeley, CA 94703
1(800) 322-6263
www.forrestsmusic.com

R. D. Gilbert
589 Larchmont, 2nd floor
Los Angeles, CA 90004
(323) 463-4930
www.rdgwoodwinds.com

Frederic H. Weiner
www.weinermusic.com

Bassoon Music:

Eble Music
www.eble.com

Gail Warnaar Double Reed Shop
PO Box 150
Barnet, VT 05819
(802) 633-4016
www.doublereedshop.com

TrevCo Music
PO Box 4
Tallevast, FL 34270
(941) 907-6944
https://www.trevcomusic.com

Some very good Bassoon websites:

www.Bassoon.org
All kinds of resources and lists

Barrick Stees website:
https://www.steesbassoon.com
Go to Teaching>reedmaking equipment

Peter Simpson's Bassoon Studio website:

http://www.uky.edu/~pcsimp01/Bassoon_Studio/index.php

International Double Reed Society
www.idrs.org

Free Sheet Music for Bassoon
www.fagotizm.narod.ru/library-eng.htm

Local bassoon repairpersons:

Carl Chudy
Lord's Point, Stonington CT
(860) 535-4245
Cell (860) 535-3908

Jim Kirker
56 Davison St.
Hyde Park, MA
(617) 364-1346
http://www.kirkerbassoonrepair.com/index.html

For repairing bent bassoon bocals:
Pope Instrument Repair
80 Wenham St
Jamaica Plain, MA 02130
http://poperepair.com

Woodwind Tech
Performance Exam Requirements

- Assemble your instrument
- One octave major scales (ascending and descending): Flute (F); Oboe (D); Clarinet (F); Alto Saxophone (G); Bassoon (F)
- One octave ascending chromatic scale: please begin on the same note as the major scale.
- Prepared piece: to be determined in class

All videos must be submitted by 11:59 P.M. on ***Sunday evening***

Woodwind Tech...Rubric for Performance Exams

Category	1	2	3	4	5
Instrument Assembly					
Posture and Hand Position					
Proper Embouchure					
Basic Sound Production					
Fingerings					
Total Score					

Each of the above categories will be assessed on a scale of 1-5, with 5 being the highest. Please total your scores in the lower right hand box. The maximum score is 25.

Teaching Video Requirements

Please submit a 10-15 video of you teaching a woodwind instrument to a student that has not previously played that particular instrument. The student may be someone from our class, or any student of your choosing. You may only be able to teach a few notes because of time constraints, but that will vary from student to student. Your teaching in the video must demonstrate your knowledge and understanding of the following concepts:

- Proper instrument assembly
- Proper hand position and posture
- Proper embouchure and sound production
- Basic conventional fingerings

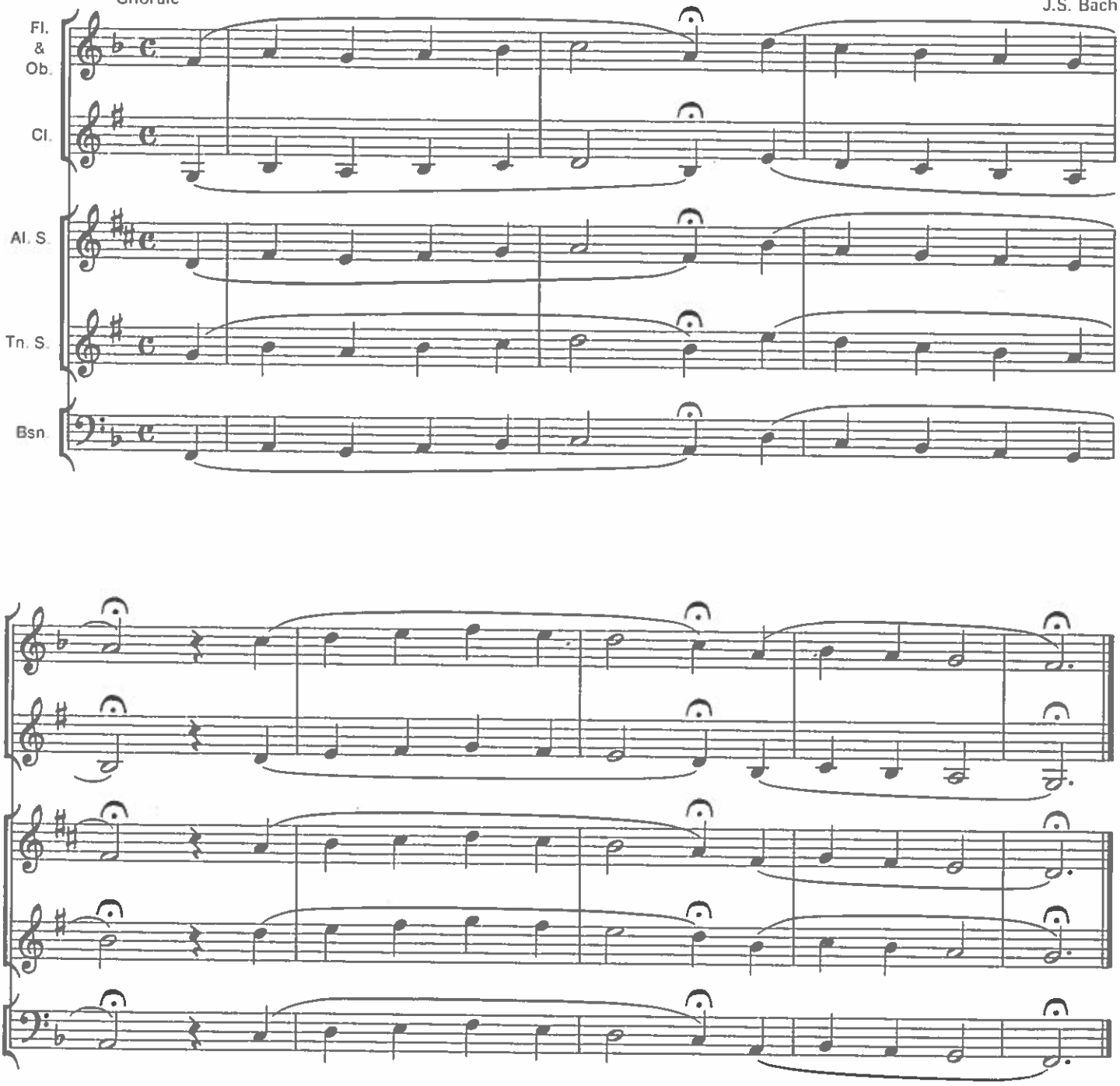
Even though this is your last assignment of the semester, I strongly suggest that you not wait until the last minute to complete it. Once you have completed at least two instruments in class you will have the necessary tools to effectively teach someone. Further clarification shall be forthcoming in class.

7

Ach Gott und Herr

Chorale

J.S. Bach

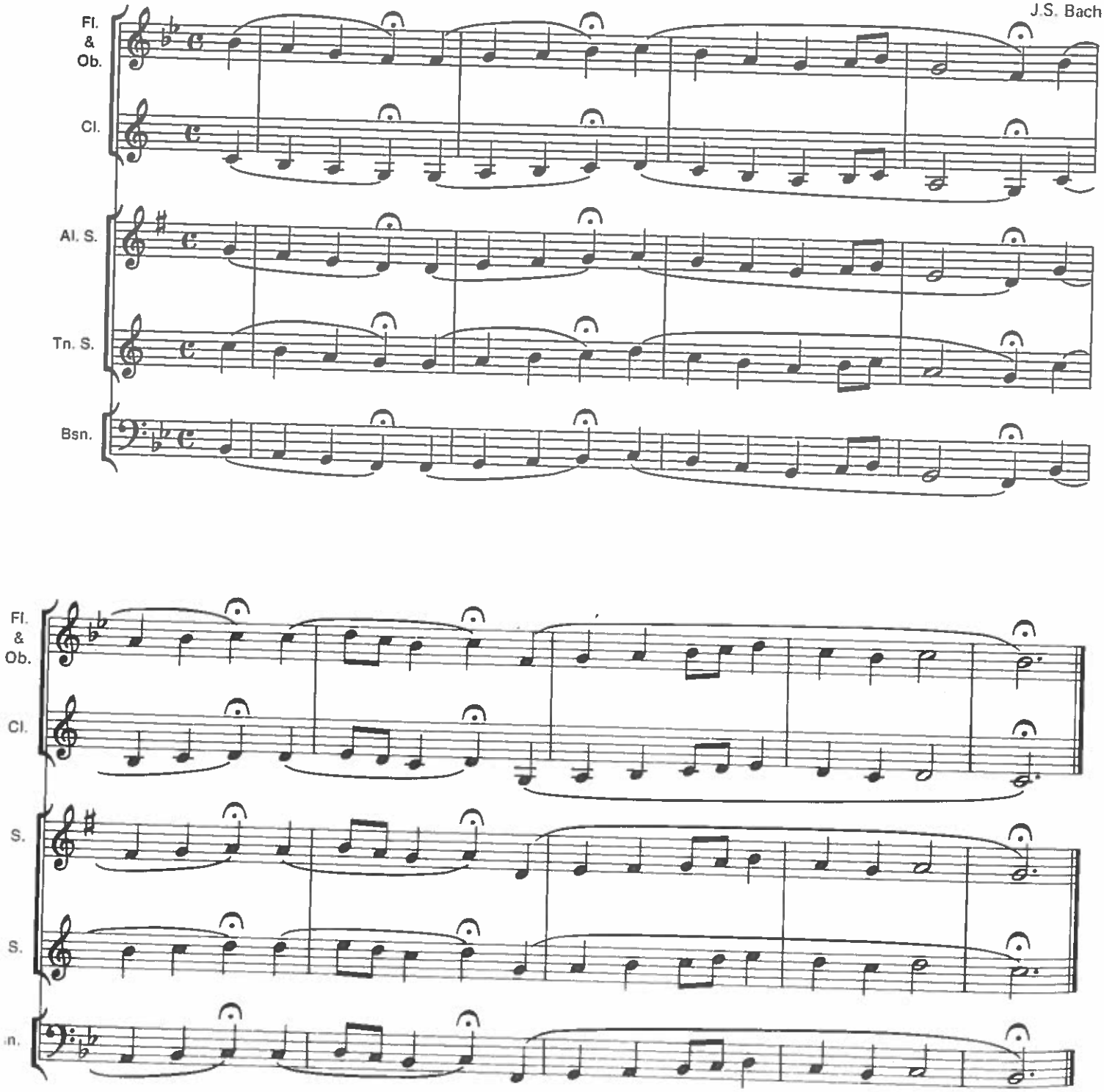


8

Chorale

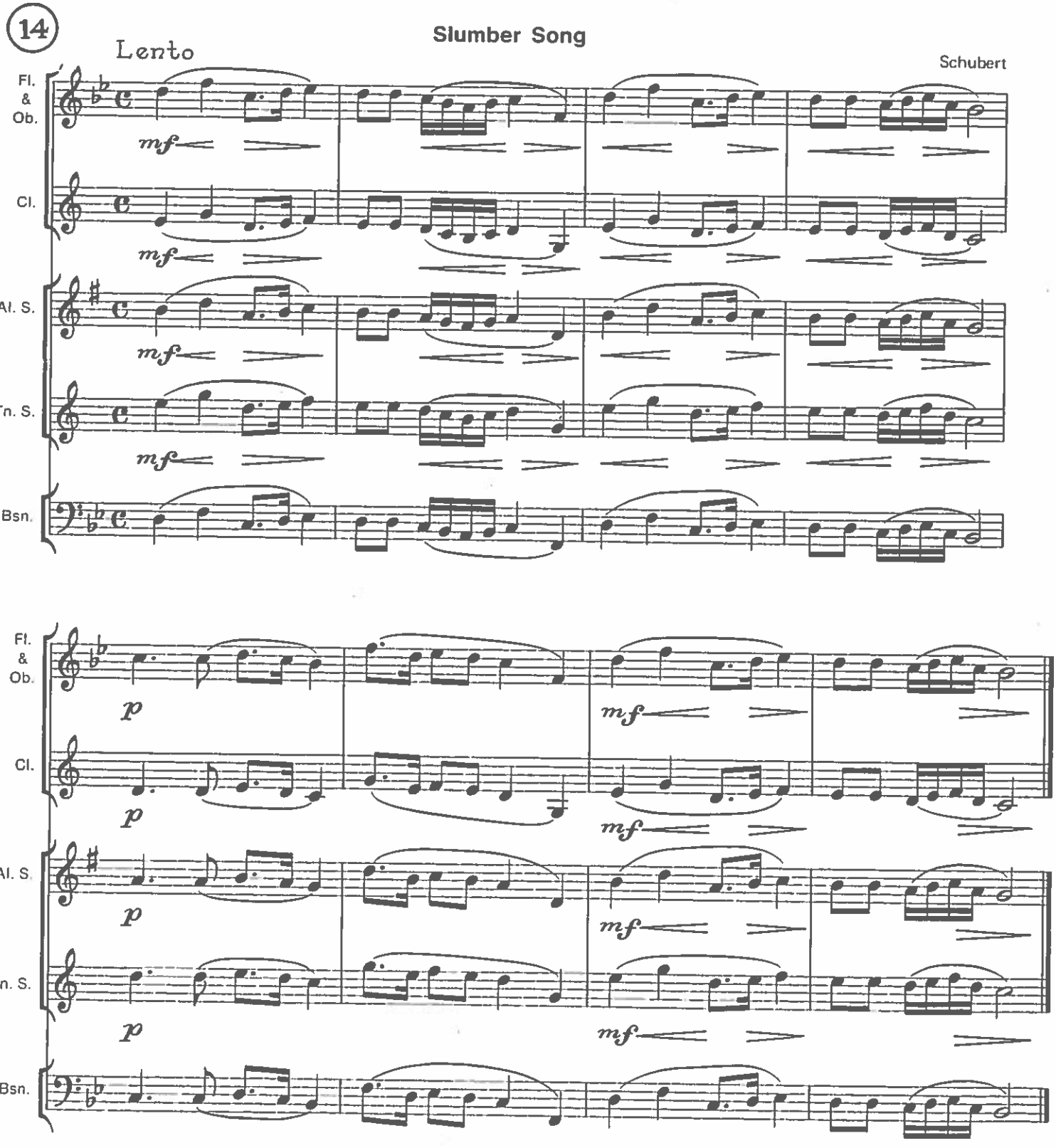
Christus der ist mein Leben

J.S. Bach



14. Slumber Song—Schubert

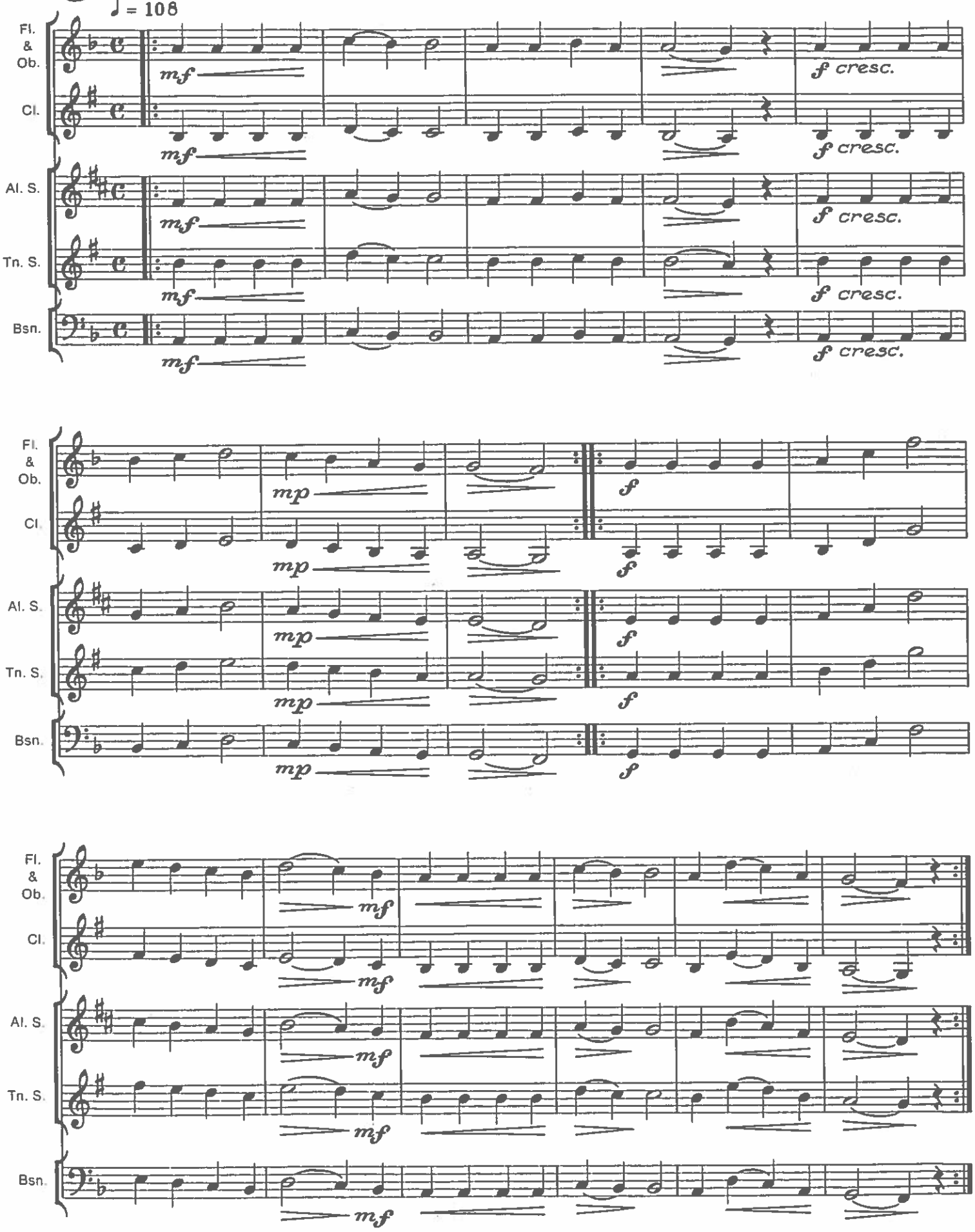
This melody makes use of notes in the fundamental octave previously learned. Play smoothly, with good tone quality, and in tune. Observe dynamics and nuances carefully.



17

Etude

♩ = 108

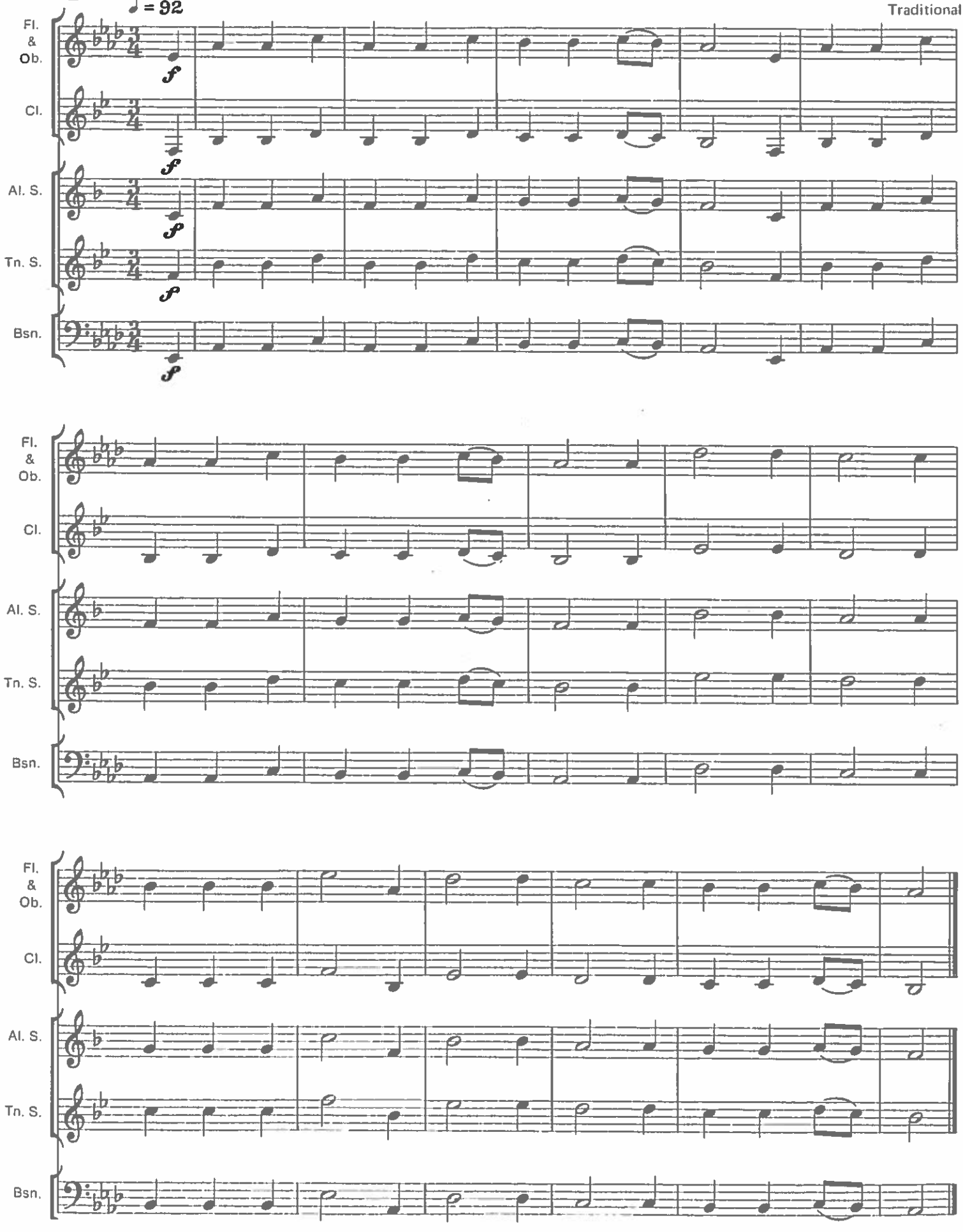


19

Lourdes Hymn

♩ = 92

Traditional



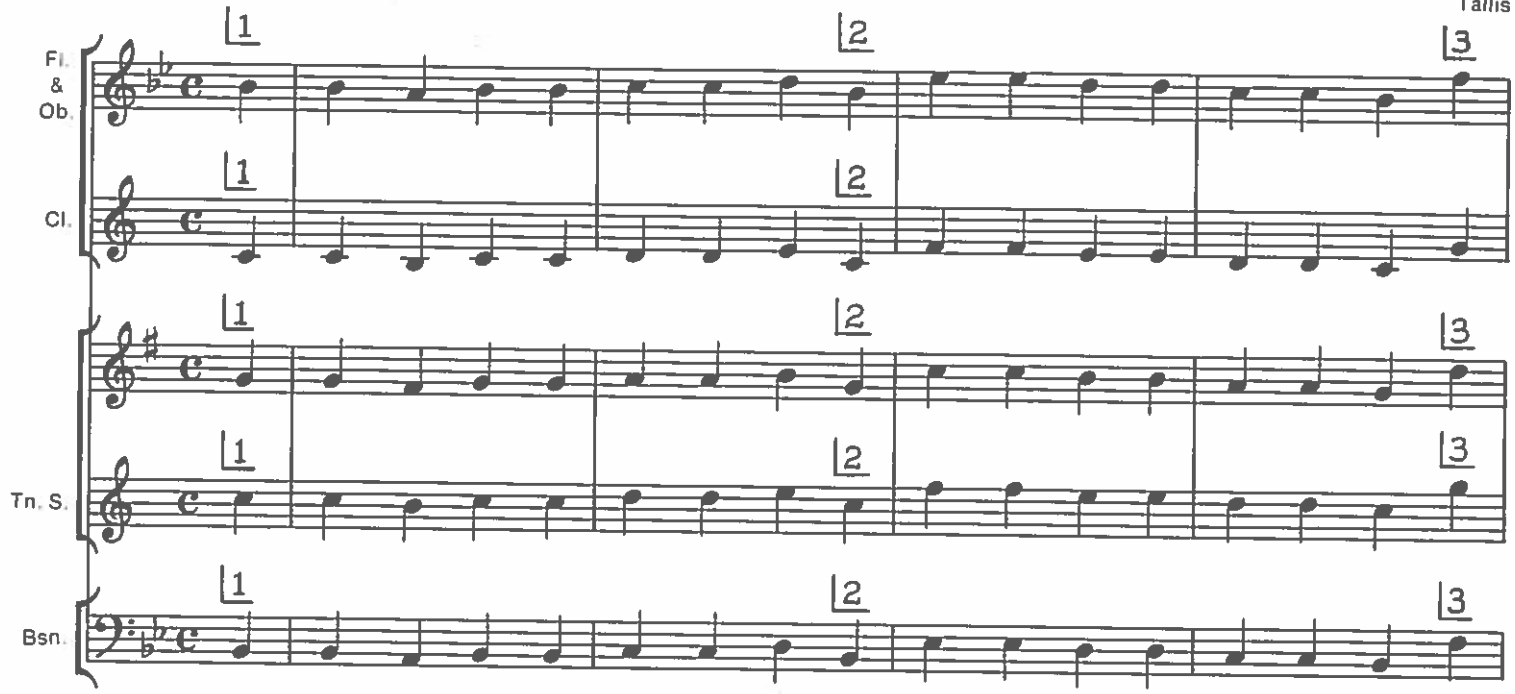
20

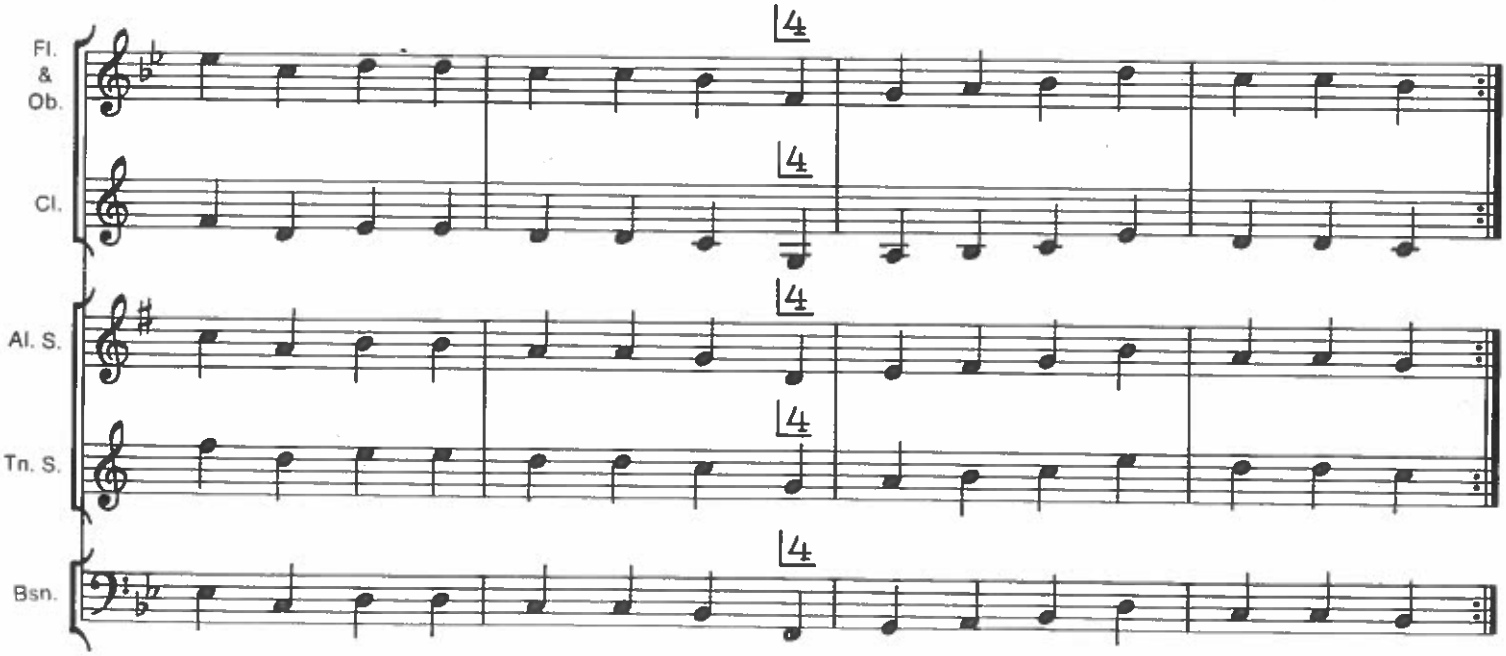
All Praise

Four-Part Round

Andante ♩ = 84

Tallis





UCONN

SCHOOL OF FINE ARTS

MUSIC

Techniques Course Instrument Loan Agreement

Name _____ PeopleSoft # _____

Phone # _____ E-mail _____

Home Address Street _____ City _____ State _____ Zip Code _____

Campus Address Street _____ City _____ State _____ Zip Code _____

Course _____ Instructor _____

Instrument	Serial #	Locker #	Date Out	Date Returned

Loan Agreement:

1. These instruments will be checked in and out by the instructor. They must be returned at the end of the period of use specified by the instructor or by the termination of the class.
2. Acceptance of these instruments obligates the borrower to maintain them for the period of the loan. The borrower must provide reeds, oil, swabs, strings, other expendables, and routine maintenance at his/her own expense at the discretion of the instructor.
3. These instruments must be returned in the same condition as they were borrowed, barring normal usage wear and tear. In the event of loss or damage, the borrower will fund the replacement of the instrument(s) of equal value or at list price for an instrument(s) of the same make and model.
4. A technician selected by the Department of Music and paid by the borrower will repair damage caused by neglect on part of the borrower.
5. If the borrower fails to return the instruments by the return date specified by the instructor or returns them damaged, the borrower will be financially responsible for the instruments and will be billed accordingly.

Failure to comply with the Loan Agreement may result in a Bursar's hold on the borrower's University of Connecticut account and the blocking of his/her University of Connecticut registration and housing.

Borrower's Signature _____ Date _____

John Mastroianni

Instructor's Signature _____ Date _____