James Jones Bowed Psaltery Owner's Manual

History

In the early decades of the twentieth century a German elementary school teacher developed the Bowed Psaltery. He wanted an instrument which children, as well as adults, could easily learn and play. The roots of the instrument are ancient. The psaltery evolved from the simple zither. Zithers are instruments with strings that run parallel to the length of the instrument. Many of the earliest zithers were developed in Africa and they soon appeared in Europe. During the Middle Ages a type of zither called the psaltery gradually evolved into a variety of shapes and sizes, and spread to many countries. These early plucked psalteries led to the development of the Scandinavian Langleik and Kantele and later to the Appalachian dulcimer, the Autoharp, the Hammer Dulcimer and, of course, the Bowed Psaltery.

Early zithers and psalteries were most often plucked, but during the Crusades, the bow appeared in Europe and was used on a number of smaller zithers, lyres, mono-chords and on very early violin-like instruments. The Bowed Psaltery was the first zither family instrument designed specifically to be bowed rather than plucked or struck.

Ukelin

This combination plucked and bowed instrument, cousin to the bowed psaltery, was popular in the US around the turn of the century. It was often sold door to door. You will find them in antique stores.

Tuning

Place the instrument on some horizontal surface with the tuning pins to your right and the pointed end of the psaltery to your left unless, of course, you are left-handed. Place the instrument in a position where it is secure and won't rotate away from you as you turn the tuning pin. Pluck the strings with the finger of one hand while turning the tuning pins with your wrench in the other hand. You may use either a T-shaped tuning wrench or a gooseneck wrench. You won't need to use the bow until your final check. Turning the pin clockwise will tighten the string and raise the pitch while the opposite will loosen the string and lower the pitch. Make sure you are plucking the string while you are turning the pin. If it is not changing pitch you probably have the tuning wrench on the wrong tuning pin. Stop immediately and check ,or you'll break a string. You don't have to turn a pin much. An 8th of a turn is a lot. If you go much over pitch you'll break the string.

With the instrument oriented as on the chart, the strings to the right are tuned to a diatonic scale of C (the white keys of the piano) while the strings to the left side are tuned to the sharps and flats (the black keys of the piano). Make sure you have a pitch pipe, tuning fork, piano or some other fixed pitched instrument to give you the correct notes for tuning. Tuning to a guitar or other fretted instruments is risky as they may not be in tune to concert pitch(A440). You risk breaking strings.If you can't hear the pitches you may want to invest in a chromatic electronic tuner. I offer a relatively inexpensive one through my shop (see accessory sheet).

I find it easiest to tune the three G notes (on the soprano) or the C notes on the alto to first establish the octaves. I then fill in the rest of the notes on the right side. The half-tones on the left side in between the appropriate pitches are then filled in. I check everything in sequence by continuing to pluck with my finger. If it is pretty close I pick up the bow and play scales or a tune and re-tune the notes that don't sound correct. Try to keep your instrument tuned to Standard Pitch A-440 as you don't want to have to re-tune to play with other instruments.

Care

Temperature/Humidity

Avoid extremes of temperature or humidity such as car trunks, wood stoves, direct sun, etc. These environments can do great harm to your instrument. If your house stays below 30% relative humidity you run the risk of cracks as wood shrinks in response to low humidity. I recommend keeping you and your instrument healthy by using a humidifier in the dry winter months.

Cleaning/Dusting

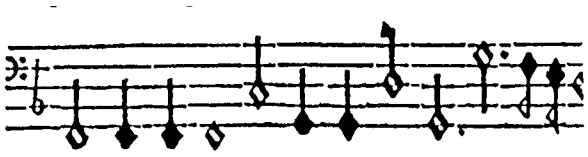
Your instrument is constructed of quality hard and soft woods and is finished with a gel poly that is rubbed on. The finish can be renewed by the addition of more poly. A regular dusting with a 1" bristle paint brush is usually adequate to maintain a fresh appearance. If you spill something on the instrument, especially under the strings, you may have to loosen the strings in that area so that you can insert a damp cloth to clean up the mess.

Display

You may hang the instrument on the wall by attaching a cord with a hook on the end that would hook under the uppermost hitch pin. I also offer a display stand which is designed to support the instrument in an upright position for display on any horizontal surface such as a mantle or coffee table, etc.

Protection

Soft cases are adequate for most situations. A rigid foam sandwiched between Dupont Cordura and a black taffeta provides the protection. A pocket for the bow and accessories with a handle and shoulder strap for carrying complete the instrument case. Many of you can make your own out of quilted padded material and/or upholstery remnants.



Strings

Gauges

Your soprano psaltery is strung with #1 gauge (.010) Harpsichord wire. The Alto has #3 (.012), # 2 (.011) and # 1 wire (see stringing chart) Replacement strings may be obtained from a music store in your area or from my shop. If you purchase a wire at a music store ask for a size wire with a ball end.

Care of

Strings will tarnish and can be renewed by rubbing with 600 grade silicon carbide paper (available from auto parts stores) or a fine OOOO grade steel wool followed with a very lightly oiled cloth.

Installing a New String

Protect your instrument by changing strings while it's on a soft surface. You'll need a good quality combination wire cutters/needle nosed pliers for installing new strings. I stress good quality, as a poor quality tool will quickly dull cutting the wire. Using the needle-nosed pliers and wire cutters, carefully remove the broken wire from the hitch and tuning pins. I stress carefully as it is at this stage where many owners are careless with their tools and dent or mar their soundboards. If you don't trust your ability you may want to cut yourself a small protective shield that can be held in place by a piece of masking tape during removal and replacement.

1) Cut a piece of wire a few inches longer than you think you'll need for the string that needs replacing.
2) Back out or unscrew the tuning pin a few turns until you see at least 1/4" of thread. (The tuning pin is like a fine threaded screw.) Make sure you do this step or like a screw the pin will continue entering the instrument until the hole in the pin disappears.
3) Insert one end of wire through the hole in the hitch pin pointing towards the tuning pins.
4) This bent portion should be just long enough to prevent the end from coming through the hole and no longer. If it is longer you run the risk of stabbing yourself as you handle the instrument. If there are errant wire ends when you've completed the task make sure you cut them off or bend them out of the way as they are dangerous.
5) Wrap the wire around the same hitch pin and draw the wire through the same hole but going the opposite direction.
6) Bring the wire over the top of the hitch pin. The wire should rest in the notch in the top of the pin.
7) Extend the wire past the tuning pin clipping the wire off about 1" past the pin with your wire clippers.
8) Thread the wire through the tuning pin and bend the last 1/16" up with the needle-nosed pliers. Steady the pliers by having them in contact with the tuning pin as your bend the end up.
9) Wind the wire onto the tuning pin and tighten. Make sure the wire makes good contact with the saddle and is in the notch in the hitch pin. This means the wire must wind onto the tuning pin at its bottom near the soundboard. This will insure the wire contacts the saddle and does not extend directly from pin to pin. If you're installing a ball-end string skip steps 1-5 although you will still need to unscrew the tuning

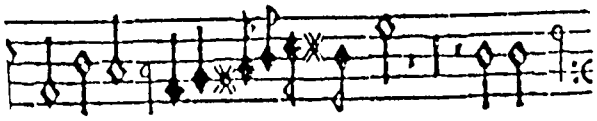
pin a few turns. The ball-end string is merely threaded through the hitch pin. The ball part should be closest to the tuning pin. If you're breaking too many strings check to see where they are breaking. If it is at the hitch pin there may be a rough spot in the groove. Fold a piece of fine sandpaper into a V and pass it through the groove a couple of times. Make sure you're tuning the string to the proper pitch. Tuning the string too high can break the wire. Also make sure the wire is resting on top of the saddle on the small bridge next to the tuning pins not running directly from hitch pin to tuning pin that makes the string length too long for that particular pitch.

Tuning and Hitch Pins

Pins in time may lose their ability to hold tension. At that point the pin may be removed and the inside of the hole coated with a thin coat of Super Glue. I use a toothpick. Squirt enough on the toothpick so it is wet but not running off. Wipe the wet toothpick on the sides of the hole. Repeat as many times as necessary. Make sure you are careful not to drop Super Glue on the face of your instrument as it will damage your finish. What you're trying to do is build up the sides of the hole so when the tuning pin is re-inserted it will feel tight and there will be enough friction to hold pitch. If it doesn't work the first time repeat the procedure. The pin should be re-inserted with the tuning wrench.

The Bow

The bow is made of hard Maple. The hair in



the bow is horsehair, the same as in a violin bow. This hair must be kept rosined to insure good tone. Avoid applying too much rosin. Rosin dust settling on your instrument will eventually damage the finish. To rosin the bow merely pass the bow across the cake of rosin a number of times until you get a clear tone throughout the entire length of the bow. Avoid handling the hair with your fingers as oil from the hands damages the hair's ability to produce good tone. If the bow slides across the string and gives you intermittent tone you'll probably need to apply rosin. If any of the hairs in the bow come loose don't panic, just remove them by cutting with scissors. Avoid yanking the hairs out. You don't want to disturb the glued knot at each end. If disturbed all your hair may come out.

Replacement

Hair must periodically be replaced when it no longer holds rosin well or becomes too thin. Anyone who rehairs violin bows should be able to do the job. If you can't find anyone locally send the bow to my shop.

Playing

Rest the short side of the triangle against your stomach supporting the instrument with your left hand. You may play standing or sitting. With your right hand grasping the thick portion of the bow draw the hair across a string between the hitch pins. The bow should be angled in reference to the instrument but drawn perpendicular to the string. It is necessary to shift the bow from string to string and from side to side (for sharps and flats) rapidly depending on the tune. Use alternating down and up bows to sound the notes. Don't be afraid to use lots of bow as your tone will improve. Increasing your bow speed and a light touch will improve the tone of the higher notes while slowing the bow down will improve the lower tones particularly on the Alto Bowed Psaltery. Try to develop your bow technique. Practice bowing using short strokes and longer more sustained strokes. Listen to the tone they produce. Short strokes generally are played toward the middle of the bow. If your tone sounds unpleasant to you change the way you bow. You have control over the tone you produce through your bowing. Experiment with bouncing the bow yet keeping the alternating up and down bows. This works particularly for faster passages. Try lifting the bow from the string after playing a note. Try keeping the bow down on the strings as you progress through a piece to keep the tone coming. Experiment.

Some advanced players us two bows. This instrument is supported with a stand and with a bow in each hand you are able with practice to produce harmonies.

I encourage you to play with other people. You have a melody instrument so guitars, autoharps, and pianos are well suited for accompaniment of the psaltery. When played with other melody instruments you have the ability to play rounds and experiment with contrasting sounds.

Music Fundamentals

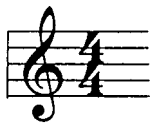
Begin by learning some of the scales in the most popular keys C, D, G, and A. The Key of C that is played entirely on the right side is a good one to start with. Then experiment with simple tunes you already know by ear. For other tunes try finding music for the recorder, flute, fiddle, penny whistle, or any other melody instrument. If you're willing I recommend learning to read music as there is a wealth of material available for those who can read. At the melody level it really is quite easy. What follows will get you started.

All musical sounds are vibrations that are heard by the ear. Fast vibrations produce high tones, slow ones low tones. The combinations of these tones or pitches and silence produce what we call music. Just as language can be represented by writing, music can be communicated through symbols. In order to read and play written music you must learn the symbols. Accomplishing this will open many doors in the world of music.

The two most important sets of symbols are 1) the symbols that communicate what pitch to play and 2) how long to play those pitches. The musical note on a staff always symbolizes both pitch and how long to play that pitch. At the beginning of all pieces of music you'll be playing is this sign. It is called the treble clef. There is a bass clef which is this sign but that clef indicates a range of notes not available on your psaltery. If you see the treble clef sign that means that the notes that follow are in the psalteries range (see range diagram) Notes are symbols placed on the lines and in the spaces of the staff to make music. Notes are named after the first seven letters of the alphabet: A, B, C, D, E, F, and G. Each line and space of a staff have a letter name. The names of the four spaces in the treble clef spell FACE and the five lines are EGBDF (Every Good Boy Does Fine). The letter designations are primarily for verbal communication. You will want to learn to read musical notes directly from the music without using the intermediary letter designations. In other words you will want to see a note on the staff and be able to play it directly on your instrument. You may use the letters in the beginning but wean yourself from them as soon as possible. Music is not written with letters.

Time

How long to play notes is communicated by how notes are written on the staff and by the time signature. Every note in music receives a certain number of beats. A beat is a pulse that you must feel initially by large muscle movements- marching, clapping and dancing. These beats are divided into measures using bar lines. The time signature is placed at the beginning of every piece of music. It is made up of two numbers. The upper number tells us the number of beats in a measure while the lower number tells us note value for one beat. For example, when the lower number of the time signature is 4 the quarter note gets one beat, the half note receives two beats and the whole note gets four beats. Other common time signatures are 3/4, 2/4, and 6/8. For each note value in music there is an equal rest value. These symbols for rests indicate the silences in music and their lengths.



Keys & Scales

Most music you will be playing on the psaltery is based on 8 tones in one of the most common keys of C, G, D and A. These 8 tones constitute a scale. Practice playing scales as such practice will make you feel comfortable in each key. What you will be experiencing is the interval or distance between the tones with regard to pitch. Melodies and scales are based on a progression of notes of different intervals. The key and its scale guide that progression of notes. Western music is in fact based on 12 tones not just the 7 tones of ABCDEFand G. These 12 tones are a half step apart. If you played all the notes on the right and left sides of the psaltery going from high to low, you would be playing a chromatic or half tone scale. The notes on the left side of the instrument are in between the ABCDEF and Gs of the right side. These notes are called sharps and flats. The number of sharps or flats to be played in a piece of music is indicated right after

the treble clef sign on the musical staff. For example, in the key of G the F is always sharped.

Warranty

Your instrument carries a 5 year warranty againest defects in material and workmanship to the original purchaser. I will repair or replace,at my option, any instrument or part thereof which is found by me to be defective.

This Warranty shall not apply of damage or woods or finishes due to carelessness or accident or does it apply to service parts such as strings, pins, etc.

To validate this warranty the original purchaser must:

- Complete and return the attached registration card.

- If a defect appears, please call and we can discuss the appropriate action. I may request you return the instrument to my shop via insured carrier together with a description of the problem.

- Be responsible for transportation charges.

I also make ten other stringed and percussive instruments for all ages and skill levels including folk harps, bowed psalteries, zithers, guitars, mandolins, Irish bouzoukis, slit drums, thumb pianos, and Appalachian dulcimers.

If you are interested please contact me

James Jones Instruments
1384 Coltons Mill Rd
Bedford, VA 24523
(540) 586-6319
Visit my web site!
jamesjonesinstruments.com

Please fill out this registration card:

Name:_____

Street:_____

City:_____

State:_____

Zip:_____

Instrument #:_____

Purchased from:_____

Date of purchase:_____

In order to grow in my ability to make quality musical instruments, I need your help.

Please comment on the following:

Sound?

Appearance?

Workmanship?

Price?

Suggestions for improvement?

Please mail to :
James Jones Instruments
1384 Coltons Mill Rd.
Bedford, VA 24523-525