On Time

The Violin

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English 460

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Mr. Bloomfield

The violin is by far one of the most beautiful sounding instruments.

The soundbox is the most important part of the instrument, although all of the parts have an importance. It is a hollow box type component where the sound can be amplified and changed slightly.

The back can be made of either maple or sycamore. These are hard-woods, which reflect the sound, so it can exit out-the 'f' holes. These types of wood come from the United States. The back can be made in one or two pieces. A one piece back is usually a better quality violin. Two pieces may have the tendency to come apart.

The back has a slight raise, about 3/4'', which tapers down to each end and at the sides. This raise is used to focus the sound into the middle of the soundbox where is can exit out the 'f' holes. The back is about 3/16" to 1/4" thick and usually has a 'tiger stripe' pattern. The better the pattern, the tighter the stripes are together, the better quality violin it is.

The sides or ribs are made of the same material as the back. They are about 1 1/4" high and 1/16" to 3/32" thick. Steam is used for form-ing the shape of the ribs to fit the back and belly. The ribs are set in about 3/16" to 1/8" from the outside of the back and belly.

There are six ribs which are joined at the four corners by a wood corner block. These blocks are an arced triangular shape to fit the corner precisely. To help support the ribs, lining is glued level to the top and bottom of each rib. These linings are about 1/16" thick and 1/4" high. The lining and cornerblocks are made of pine and spruce.

The belly (front), is the same size and shape as the back. It has the same depth of curve but is slightly thinner. The wood used is a good quality pine or spruce. The softwood allows the sound to penetrate easily.

It should be a tight, straight grained piece of material, with the grain running parallel to the length of the violin.

When looking at the face of the violin, the bass bar is underneath on the left hand side. It can be carved into- the belly or glued on. It is a soft wood, which runs about 3/4 of the length of the violin. The bass bar measures about 3/8" wide, 1/2" thick, and 9" in length.

The purpose of the bass bar is to start the vibration of the belly. This vibration is very little and cannot be noticed while playing or watching someone play the violin. The bass bar gets the small vibrations from the strings, through the bridge.

The bridge is a thin hardwood material that is about 2 " wide, 1 1/2" high and 3/16" thick. It is arced on the top which is equal to the arc of the fingerboard. It has a wide top, a thin waist and a wide bottom. Attached to the bottom is two short legs to fit the body of the violin. The bridge which is held up by the strings, sits perpen-dicular to the length of the violin and sits about 3/8 of the way from the back of the violin.

In about the middle of the belly there are two 'f' holes running perpendicular to it. These 'f' holes are a fancy letter 'f', which are mirror images of themselves and are about 3" long. They have 'f' notches in the centre of each 'f' which are used to align the bridge with. The 'f' holes' purpose is to allow the sound to escape the soundbox.

The tailpiece is made of ebony, which is a shoehorn shape with holes equally spaced at the large end. Into these holes, the strings are placed to hold their tension tight. At the small end, there are two holes underneath, to attach the catgut tailpiece loop to it. The tailpiece loop is held by the tailpin. It is a pin about 1 1/2" long and 3/8" in diameter. It is placed into a hole directly at the center back of the violin, which is drilled into the rib. Inside, holding the pin and supporting the ribs is a tailblock. It is a piece of pine or spruce wood, about 3/4" thick, the same height as the ribs, about 1 1/4", and 1 1/2" in length.

The strings reach from the tailpiece to the tuning pegs, located in the pegbox. The pegbox is carved into the neck, which is made of the hardwood, maple or sycamore.

The neck is about 9 1/2" long, 1" wide, 1" thick, and is tapered down to the pegbox. It is attached to the soundbox by the ribs, back and belly. It is a half circle shape with the arc toward the back of the violin. The top, toward the belly, is flat for the fingerboard to be attached levelly. At the large end of the neck, inside, is a pine or spruce block glued on for support.

The very tip of the neck, past the pegbox, is the scroll. It is a fancy swirl like ornamental carving.

There are four pegs, made of ebony or some other hard wood. They taper so they can be wedged into the pegbox, where they will not slip.

Attached to the neck is the fingerboard, which is a very hardwood of either ebony or rosewood. This allows the least amount of wear on it. It is about 19" in length, 1/4" thick and is tapered from about 3/4" at the pegbox, to 1 1/4" near the bridge. The strings are dep-

ressed onto the fingerboard to produce the note.

At the small end of the fingerboard there is a head nut. It is the same width, and is slightly thicker than the fingerboard. It keeps the strings slightly off of the fingerboard.

The violin has four strings which are tuned in fifths. The first and smallest string is tuned to the key of (E). The second is tuned in the key of (A), the third in (D) and the largest and forth is tuned in the key of (G).

The (E) string is usually made of steel because it is so thin. The (A) string is a catgut or nylon core with a steel or aluminum winding, as is the (D) string. The (G) string has a catgut or nylon core wound with copper or silver.

On the back and belly, about 1/8" in, is purfling. It is laminated wood about 1/16" by 1/16". It follows the outside shape of the violin, all the way around. It is inserted into the wood, by carving a small piece of the existing wood out. It helps stop a crack from producing in the body of the soundbox.

Better quality violins have purfling, where as a very poor quality violin has a painted purfling just for looks.

Although a good violin is the most important, a good quality bow has almost the same importance. The bow is 29 1/2" long and is made of Pernambouco wood which comes from Brazil. The bow has more than 150 horse hairs from tip to tail.

Out of the many great violin makers of the 16th and 17th centuries, the Amati family was one of the best. They were an Italian family, native to the town of Cremona.

Andrea (1530 - 1578) was the first person of the Amati family to devote his life to violin making. Some of his first violins were dated back to 1564. He introduced a modern shape of violins, which was later modified by Stradivari. He also introduced the amber coloured varnish which is still used today.

Antonio (1550 - 1638) and Geronio *(1556* - 1630) were the sons of Andrea who carried on his great craftsmanship

Nicolo (1596 - 1684), was the son of Geronio, who inherited the business from his father and uncle. His violins were of the highest quality, distinguished by their practical shape, beauty and the power of their tone. It was in his shop that Andrea Guarneri and Antonio Stradivari received their violin making skills and training.

Girolano (1649 - 1740), was the son of Nicolo. He continued the high degree of craftsmanship of the Amati instruments. He produced a large number of high quality instruments, but was later outdone by Stradivari, who modified the Amati violin.

The Guarneri family was another great family of violin makers, who also lived in the town of Cremona during the later part of the 17th century and the first half of the 18th century.

Andrea (1626 - 1698), was considered the absolute best violin maker during that period of time.

Andrea had two sons, Pietro of Mantua (1655 - 1720), and Guiseppe (1666 - 1740), who carried out their father's tradition and craftsmanship. Pietro built violins of considerably more cut into the belly, and

Guiseppe also developed his own design. These styles of violins were both well noticed.

Guiseppe had two sons who were violin makers. Pietro of Venice, (1695 - 1762), who varied the quality and the brilliance of his father's violins. Guiseppe del Geru, his other son, was the most famous of the family. He was inspired by the Amati family style of violins, but he altered it. He experimented and occasionally showed some carelessness in the final finish. However, his''best instruments are beautifully crafted and characterized by a series of mellow tones. On most of his quality violins, he would write the inscription "I.H.S." after his name. This inscription is the starting letters in the Greek word for Jesus. His instruments, such as the "Cannon" competed with those of Stradivari.

A famous German violin maker was Jacob Stainer (1621 - 1683). His violins equaled and sometimes surpassed those of Amati. These violins had a sweet tone because of the high arch of the back and belly. These violins were good for small rooms and for chamber music. They did not have the power that the Stradivari violin had. He produced some violins with straight necks, compared to the body, and some with wedge shaped fingerboards. In the 1700's his violins were sometimes higher priced than Stradivari's.

Paolo Magginie (1580 - 1632), built violins for power in the tone. He was a Brescian and most of his instruments were designed with double purfling. They sometimes had ornament shapes made out of purfling.

Antonio Stradivari was the greatest violin maker in the world. His violins have still overcome the quality of today's violins. An original Stradivari violin is priced as the highest in the world today.

In 1984 a Chinese business man bought an original Stradivari violin for 1.5 million dollars. (Reader's Digest)

Stradivari was born in 1664 and died in 1737. He was also a native to Cremona. He became a violin craftsman under the supervision of Nicolo Amati. Stradivari made 1116 violins and today only 540 are in existence. He made many modifications to the original Amati violin.

Stradivari lowered the belly and made the ribs rounder. He also made longer cornerblocks. Stradivari once made a "long" violin but later modified it to today's smaller "classical" model. By flattening the belly it gave the instrument a more massive sound. This sound was used for concerts or large halls where it would be noticed well.

Stradivari's "Allard" was considered the finest made violin, which he produced in 1715. The most famous was the "Messie", which he produced in 1716.