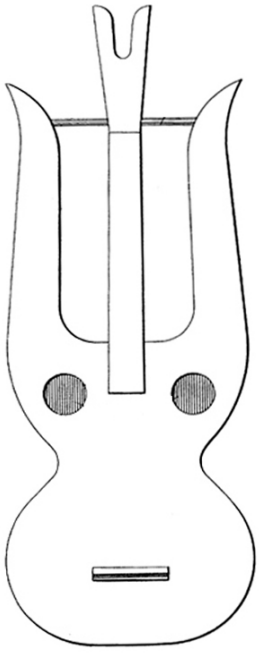
The “Lyric Harp Guitar”

(or The Flying Beehees and Other Stories)

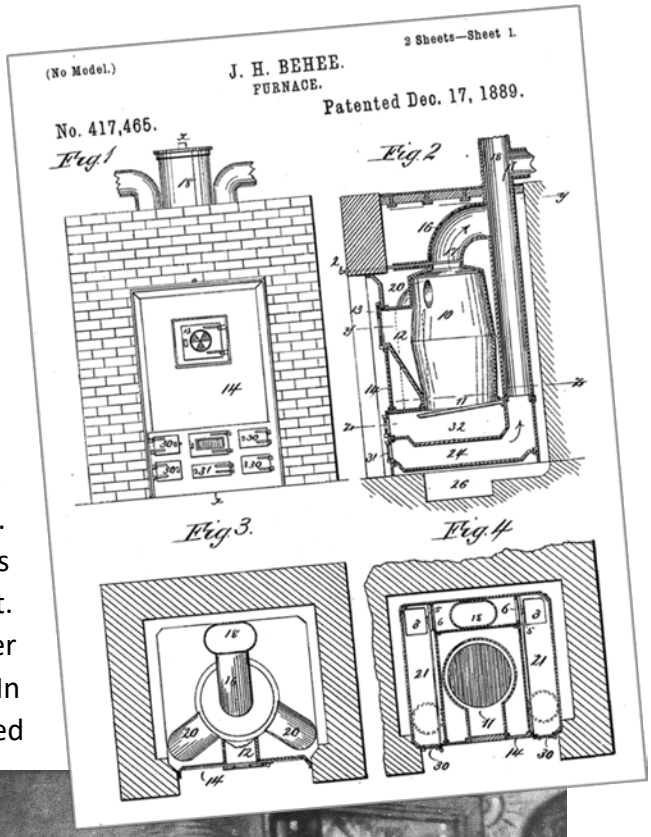
Gregg Miner

Probably best to strap in for this one! While the primary intention of this long and meandering article was simply to investigate a rare and obscure musical instrument, I deemed it more interesting to do so by way of the extended family of the inventor. Indeed, the research material – and the story itself – spans well over a century. Along the way I will finally resolve the confusion of two men named Joseph Henderson Behee, and later, focus on a fellow named *Frank* Behee. Come to think of it, there will be a *lot* of Behees in this article, including various relatives and descendants of Joe, Joe & Frank. You will also find contained herein: 1950s pop singers, several obscure guitar players, actor George Hamilton, assorted mechanical inventions and The Ed Sullivan Show. Even Phil Spector makes an appearance! But mostly, it is about the “Behee Lyric Harp Guitar,” which – as you can plainly see – is not actually a harp guitar at all, but a novel *lyre* guitar. So yes, it is going to get extremely complicated, but also a lot of fun. And yes, there will even be a trapeze artist or two!

My first introduction to this instrument was about twenty years ago, when a local woman found me online and offered to sell me one. We met at a Denny’s in Hollywood, I took a few parking lot photos (that’s it at left after Photoshop), but I ultimately passed on the guitar. I wrote my first Harguitars.net article in 2012 after receiving correspondence from people who recognized the instrument in a couple of my previous blogs. That article then garnered even more attention, and I received a lot of invaluable new information, clues and corrections (plus a couple new smoking gun photographs!), most notably from Lee Thomasson, a Behee descendant. His first fix was simple but crucial. Namely: During my initial research on the cryptic 1900 illustration at right, I had uncovered random bits of information on the patent owner “Joseph Henderson Behee” – but parts of it didn’t line up. It turns out, that’s because there were actually *two*: a father and son with identical names, yet neither ever referred to as “Senior” or “Junior.” (That’s my excuse and I’m sticking with it! BTW, everyone else, including Mugwumps’ Michael Holmes had similarly assumed they were one person.) I hope to now unravel then reassemble everything in the winding threads that follow.



Joseph H. Behee, Sr., "All-Around Genius"


(No Model.) 2 Sheets—Sheet 1.

J. H. BEHEE.

FURNACE.

No. 417,465. Patented Dec. 17, 1889.

Fig 1 Fig 2

Fig 3. Fig 4

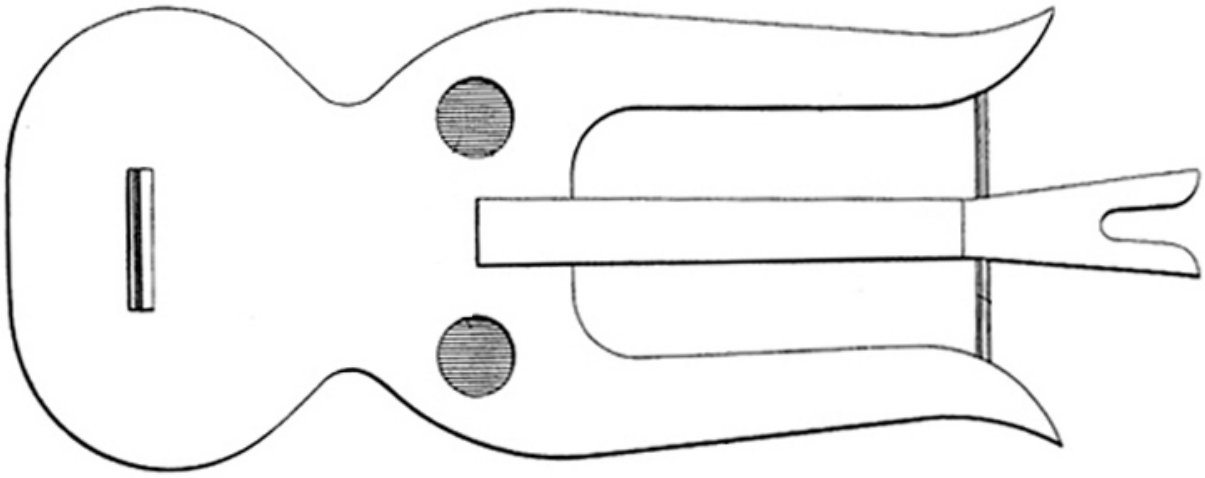
The man who would end up drawing that weird guitar in 1900 was **Joseph Henderson Behee**, born in Pennsylvania in 1843. After a three-year stint in the Civil War with the Union Calvary, the 5'6" 20-year-old settled in Leavenworth, Kansas in 1864, finding work as a millwright. Within a few years he became a pattern maker in the town foundry (in the foundry industry, a "pattern" is the wood or metal object from which the original casting mold is made), and by 1877 had opened his own foundry, Behee, Windbery & Co. (later "J. H. Behee & Co."). His business grew to become Union Machine Works in 1879, with Behee remaining on as Superintendent. Leaving the company in 1885, he joined new partner Michael Burns and they ran the Phoenix foundry. In 1889, Behee received his first patent for an improved coal furnace, with rights assigned to "M. Burns & Co." Once again, he left after about five years. He next began moonlighting as a Leavenworth councilman in 1895, and worked at Fisher Bros. (on "Corliss engines") for much of the next ten years.

In 1867, he married Mary E. Towne (1852-1929), and they eventually had up to twelve children (genealogy is incomplete). Of importance to the musical instrument part of the story are **Joseph H. Henderson** *("Junior,"* 1879–1953), **Franklin Benjamin** ("Frank," 1883–1971), and **Alice** (1888–1967).

At right, the Behee family c.1887: Mary Elizabeth and Joseph H. Senior are seated. Joe Jr. stands behind his father, Frank is in front. Alice would be born next.

Additionally, Frank's grandson **Ron Behee** was a young eyewitness to later events, and "Great Uncle Frank" also passed down some of the family lore to Alice's grandson **Lee Thomasson**, who has kindly shared his information and archives with us. Lee's oldest Behee story concerns Joseph Sr. inventing an improved train air brake. Frank relayed how "a crooked patent attorney sold the application to Westinghouse who then got the patent. Westinghouse's attorney came to Joe's shop to buy the drawings. Joe Sr. had Frank get the drawings and then told Frank to toss them in the furnace, which he did. Joe told the Westinghouse attorney, "You have the patent, you figure out how to build it!" Presumably Westinghouse did; this might have been Patent #841,750, filed in 1904.

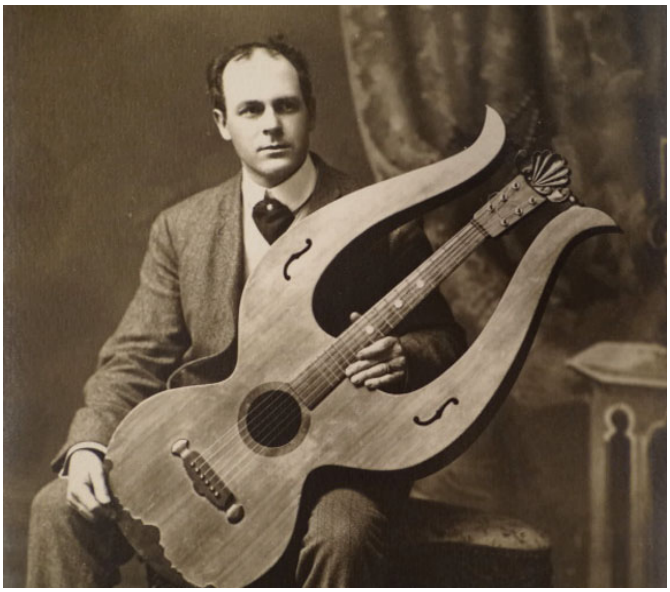
Little is known about Joe Sr.'s outside life, especially his musical interests. An unnamed daughter played a "string instrument" in the Salvation Army Band, and in 1905 it was revealed that Joseph had been building violins vocationally "for over 40 years" – so from about 20 years old! We still have no idea if he also *played v*iolin – or more importantly, guitar – as 1900 suddenly saw him create the seemingly out-of-the-blue design patent for his unusual lyre-shaped guitar. I'd like to imagine that he was at least a casual player and clearly must have enjoyed music; perhaps he just wanted to put his inventor design skills to more artistic use.



The Lyric Harp Guitar

As noted above, the Behee "harp guitar" was not what we would actually term a *harp-guitar* – then or now. But it wasn't the first or last to be similarly misnamed. It might be helpful (and fun!) to take a quick look at other American lyre guitars at the turn of the previous century. (For a more detailed look at lyre guitars and similar instruments throughout history, see *Lyre Guitars*.

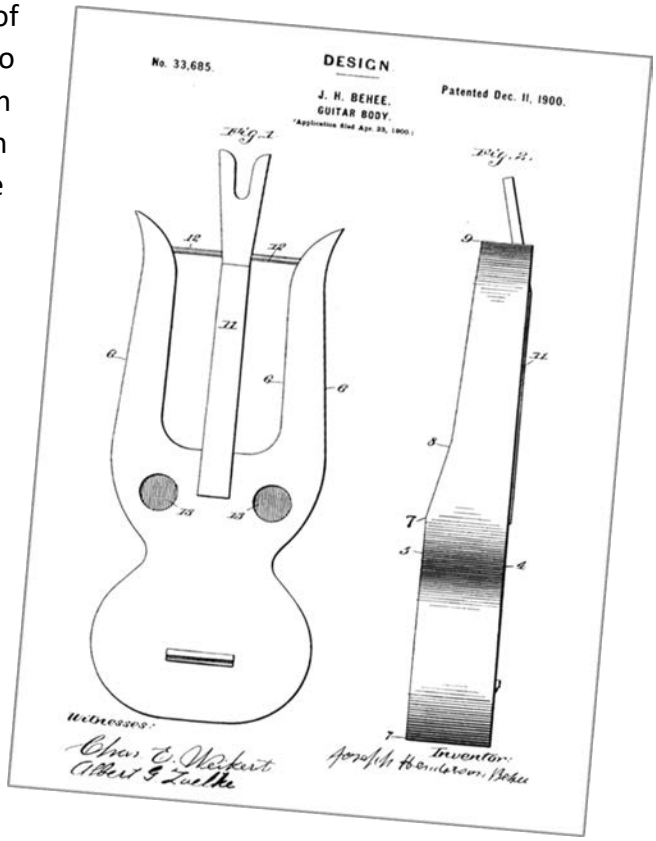
Note the striking similarities between these three instruments. From left-to-right:
Chicago's Lyon & Healy firm introduced this "Terz Lyre Guitar" in their c.1892 catalog. The center instrument has a label reading "This harp guitar made in 1891 by Farnholm Brothers. Rebuilt in 1931 by C. Farnholm the piano tuner. No other instrument made in the world like it." Presumably, the later Farnholm replaced an earlier label or otherwise knew its date, though it could have simply been a word-of-mouth guess. Note the same unfortunate choice of "harp" rather than "lyre" for the design. One other similar Farnholm instrument has also been seen. The last instrument – inspected by Richard Johnston on *Antiques Roadshow* – has no date, only the name "F. Gaulke," and is a very professionally made guitar.



A marvelous fourth variant, something like a cross between those last two appears in this evocative early American photograph.

Surprisingly, none of these earlier builders – not even Lyon & Healy – seems to have applied for a design patent.

1900: Enter Joseph Behee. Was he aware of any of these other similar instruments? We have no way to know. His similar "lyre-shaped" idea is distinctive in having much straighter arms, a head with its own matching wings and of course the double soundholes. (These had also been seen in America by this time, most notably in the Harwood brand harp guitars.)

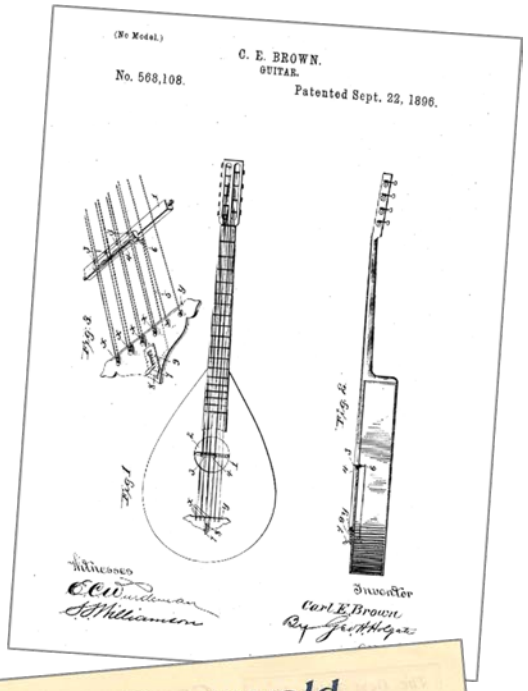


Behee neither named it nor described it in his simple minimalist patent. So previous researchers (including myself) only knew we were looking at a lyre-guitar; there was nothing yet to denote the "Lyric" brand name, or "harp" designation. Nor was there any evidence that one of these had actually even been *built*. There was only a single clue that the guitars were intended to be manufactured in a 1907 *Music Trades* issue (relayed to me by the late Michael Holmes of Mugwumps).

Needless to say, four years ago I was thrilled to receive Lee Thomasson's photo of his grandmother Alice Behee Brenneman playing her father's patent guitar! I was especially surprised and excited to see that it was a *12-string guitar.* Lee believes the photo is from around 1904. Subsequent newspaper searches soon revealed new information on the "Lyric Guitar Company" in Leavenworth, then Kansas City.

But I'm getting ahead of myself. A May 1905 news clipping informs us that well before the official start of Behee's official Lyric Guitar enterprise, a musical quartet was performing with "wonderful twelve string guitars and mandolins manufactured by Joseph Behee, a Leavenworth pattern maker and musical instrument expert." So, judging by Alice's picture, the quartet news and later ads, it appears that Joseph H. Behee focused specifically on creating a *12-string guitar* from the very beginning. Somewhere between 1900 and 1905, Behee had introduced not only a new style of lyre guitar, but was building some of the very first fully double-strung 12-string guitars in America!

Had he seen the many the many *Music Trade Review* articles on Carl Brown's 1896 10-string invention and Grunewald's subsequent pre-1900 10-string, soon to turn into a full 12-string? (See my article Birth of the American 12-string Guitar.) He similarly might have appropriated the "harp" designation from those instruments; both were named the "Harp-Guitar," a rather inaccurate allusion to the "chimey" sound resulting from the doubled octave strings. In any event, Behee then just went one step further in also giving it the special shape – one that many laypeople continually confuse with harps.


(No Model.)

C. E. BROWN.
GUITAR.

No. 568,108. Patented Sept. 22, 1896.

Witnesses
C. C. Linderman
A. D. Williamson

Inventor
Carl E. Brown,
By Geo. H. Strong


THE MUSIC TRADE REVIEW 27

THE "SMALL GOODS" TRADE

The Grunewald Harp-Guitar.

A NEW INVENTION POSSESSING MUCH MERIT THAT DEALERS SHOULD INVESTIGATE.

Rene Grunewald, of New Orleans, La., whose fame as a manufacturer of mandolins and guitars has traveled far and wide, has now entered upon the manufacture of the Grunewald harp-guitar—an instrument which is destined to find a large market in all parts of this country as well as South America.

The harp-guitar is a simple yet radical improvement on the guitar, and owing to the fact that there are ten strings instead of six, it gives a greater scope in playing, and is destined to become the great solo string instrument for amateurs and professionals. All the popular airs of the day can be played on the harp-guitar. This is owing to the arrangement and tuning of the strings. Any one who can play the "chords" upon the guitar, can, upon the harp-guitar, play any piece of music he may know with the greatest ease, carrying the air and a full accompaniment. The method of execution is a little different than upon the ordinary guitar, the air being picked with the bare thumb upon the double strings, while the accompaniment is played with the fingers (and thumb when not otherwise occupied) upon the other available strings. After a few days practice a beginner will be surprised at the progress made in mastering this instrument.

In tone the harp-guitar resembles the concert autoharp, or the mandolin and guitar (without the trill of the former), while the volume of tone produced is nearly double that of the ordinary guitar. The harp-guitar is a double instrument, and one can play it according to the regular method; this can be reversed and the instrument played as a guitar proper. It is admirably adapted to the stage or parlor, and furnishes a splendid accompaniment to the voice, the air being carried whenever desired. Anyone can play the instrument. The player is not obliged to confine himself to music written especially for the guitar or exercises or such pieces as the "Spanish Fandango," etc.; nor is it necessary that he should be an expert at fingering. It is an easy task to master it and become quite expert after a very little practice. The cuts herewith of the back and front of the harp-guitar will furnish an idea of its appearance. The instrument was patented Sept. 22, 1896.

The harp-guitar is so superior to the ordinary guitar that it should at once win its way into immediate popularity. It is so much easier to play, and the wide range, scope or compass under the left hand when in a position for playing the ordinary chords is such that the player is not obliged to run up and down the finger-board, as is customary when playing upon the guitar. The fingering is greatly simplified. Then there is the arrangement of the treble strings and the increased volume of tone, and what is more important still, the fact that the harp-guitar is a double instrument and can be converted into a guitar, if so desired, and then changed into a harp-guitar without re-tuning the strings.

So many advantages are embodied in the harp-guitar, as compared with the guitar proper, that they become forcibly apparent when the instrument is examined and tested.

Dealers should not hesitate to write Rene Grunewald for full particulars regarding this instrument. In the hands of a progressive man the agency can be made a valuable one. The harp-guitar has novelty and merit to commend it to the amateur or the musician, and then it is sold at a reasonable price—a price that is within reach of all. There is no reason why Rene Grunewald should not build up an immense trade with the harp-guitar, and we recommend it to the trade as worthy of immediate investigation.


The Grunewald Harp-Guitar

A New Invention!

The King of Guitars!

The Great Solo Instrument!

The Acme of Perfection!

Twice the Tone of any Guitar!

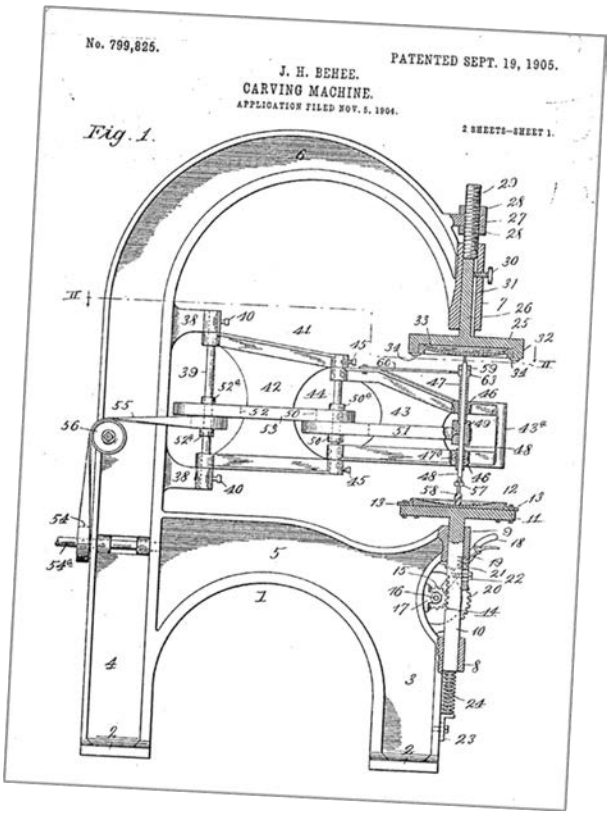
Twice as easy to Play!

12 Strings, Yet Easier to Play than 6

Only $12.50.

Canvas Case, Flannel Lined, Leather Bound, $1.50

Being an inveterate tinkerer, Behee had long been thinking on means of mechanizing the process of producing his stringed instruments. Finally, in November 1904, he filed a patent for his "Carving Machine," "…whereby the front and back portions of musical instruments – such as violins, guitars, mandolin, &c. – can be cheaply and accurately made."


No. 799,625. PATENTED SEPT. 19, 1905.
J. H. BEHEE.
CARVING MACHINE.
APPLICATION FILED NOV. 5, 1904.
Fig. 1.

A visiting reporter to Behee's shop described what he saw in a January 1905 article. The electricity-driven prototype machine cut using a mechanical augur-type blade, first hollowing out the interior of a violin top or back, then cutting the exterior to thickness. The piece was then removed and finished by hand by scraping and sanding. Behee also did away with clamps by using a heated form to hold and glue all parts together.

MACHINE TO MAKE VIOLINS.

A Leavenworth Man Invents Device and Will Commence Manufacturing.

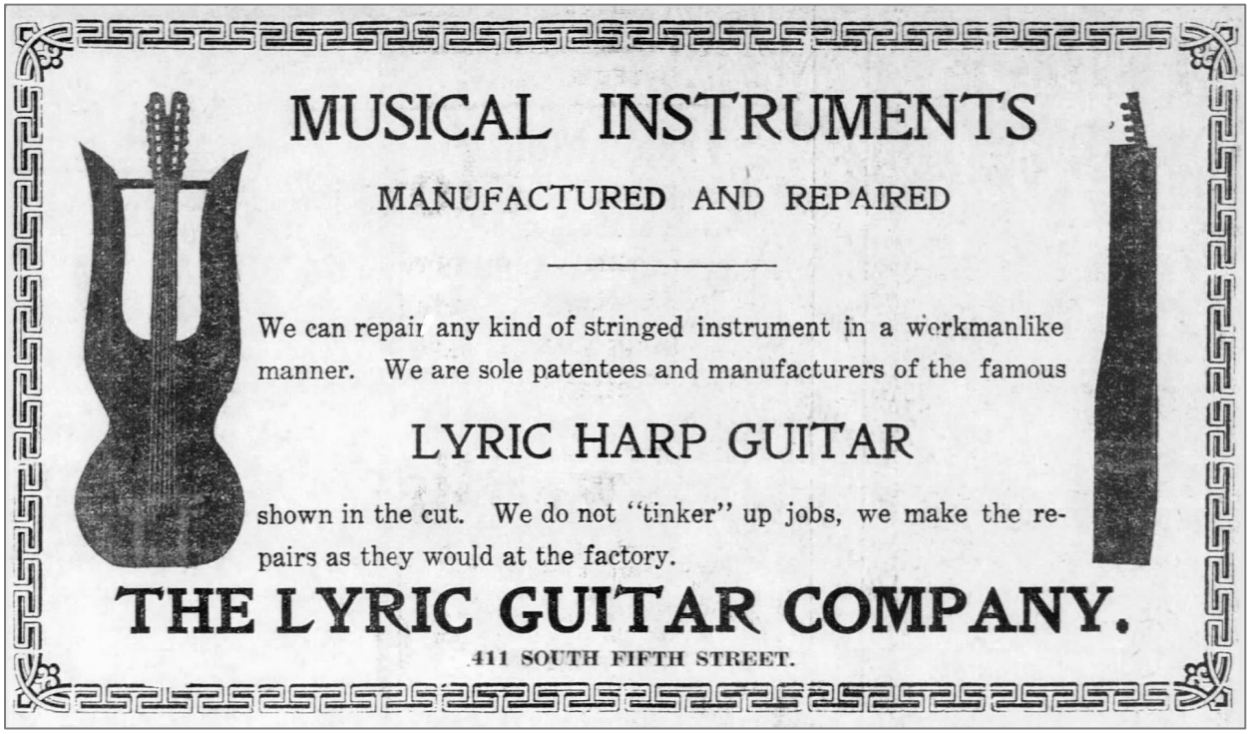
A dispatch from Leavenworth, Kan., says that "Joseph Behee, a well-known Leavenworth patternmaker and all-around genius, has been granted patent rights on a wonderful machine, which simplifies the manufacture of violins, mandolins and guitars. Experts say it will revolutionize the stringed instrument business. The carving mechanism works automatically, and follows a model made of metal. The back and front of a violin can both be cut from slabs of seasoned wood in about a half hour. Heretofore these delicately rounded, sounding surfaces have been carved with the utmost labor and precision by hand, or in the cheap violins, they are 'formed' by steaming the thin wood and pressing it between hot iron formers. Behee's machine combines the speed of the steaming process with the precision of the hand cutting method. Steam forming spoils the vibrating properties of the wood."

The idea above outlined was, if we mistake not, used by C. G. Conn, the well-known band instrument manufacturer of Elkhardt, Ind., in the manufacture of violins as far back as ten years ago. We do not know whether he is still employing this process or not, but it seems full of possibilities along certain lines.

He clearly had high hopes that his machine would revolutionize the violin-building industry. Within a month he had nibbles from investors for a violin factory in Topeka, though this never materialized. When his patent was finally granted in September, 1905, he went all out; several dozen Kansas newspapers published versions of this press release (at right) throughout November. The same piece appeared afterwards in the *Music Trade Review and The Cadenza*, with an added caveat about the Conn firm doing something similar for ten years.

Alas, Joseph Behee was unable to find investors willing to put his violin factory idea into production. But he may have then stayed in his musical frame of mind, so created the "Lyric Guitar Company," likely knowing that his flat top & back guitars and mandolins would be much simpler to produce.

He began running daily ads in The Leavenworth Post in mid-April 1906, focusing on repairing and building stringed instruments, including his patented guitar, which he now chose both a brand and instrument name for: the *Lyric Harp Guitar.*



We can now observe that the instrument Joseph's sister holds is essentially identical to the later advertised instrument. In the poorly reproduced ad photos we can make out that it has the double sound holes and also the wide metal bridge straps. The "V" headstock of Alice's guitar, this 1906 ad and later 1908 ad show a slight difference in shape and location of the tuning machines; it seems like Behee was constantly trying to figure out how to get his 6-on-a-strip tuners to fit into his original lyre-winged patent drawing. As for his support straps, while many luthiers had occasionally utilized various tailpieces or bridge supports, his looks like more of a crude, brute force job. Behee undoubtedly did it because he was worried about the tension of twice as many strings. The inelegance of it brings up the topic of Behee's luthier skills and aesthetics. Despite Behee's renown as a pattern and mold maker in both wood and metal, the fact that he was never more than a hobbyist in violin building and hoped to mass produce machine-made violins suggests that he may never have learned the art and finesse of master grade musical instruments.

We saw earlier that Joseph Behee had already built mandolins to go with his 12-string lyre guitars, but we can only imagine what they might have looked like – miniature lyre-armed instruments, perhaps?

Dedicated harp guitar fans are probably familiar with this image (this copy is from my own collection) as a modern reprint has been routinely showing up on eBay for years, labelled "Harp Guitar Player." It is of course, a harp *mandolin* (of the hollow arm-but-no bass strings variety), and I am certain it's a *Behee*. The giveaways are the "V-shaped headstock, similar to his lyre guitar, and the blocky, uniformly-deep arm, easily discernible due to the held angle (compare the deep arms in the profile of his ad's lyre guitar above). But the real clue was that Lee's grandmother had a copy of this photo with their original family documents. I'm virtually certain that it's a Joseph Behee design, perhaps constructed by him or others at the Lyric Guitar Company. Lee suggests that the player could be a Behee also, as some were in Vaudeville. I'd love to know the story behind this guy!

Exciting as it is to discover these instruments today, things were apparently not going well for Joseph Behee and his new enterprise. Within a month, he found it necessary to remind the public that he could offer a wide variety of other work, which he now listed first (left).

LET US DO IT!

We have improved machinery and modern methods for turning out work in a hurry and in a workmanlike manner. Pattern making is a specialty with us. All the hundreds of patterns for the Fisher Corliss Engines were made by us.
We have power saws, planers, jointers, band saws, etc. We repair musical instruments and are the sole patentees and manufacturers of the famous

LYRIC HARP GUITAR.

Bring in you sick violin or mandolin and we can make it as good as new.
We make screens to order to fit your windows. We can make commodious box seats, which you can cover yourself, any shape or size. Give us a trial.

The Lyric Guitar Company,
411 SOUTH FIFTH STREET.

And by July, he had given up on the company name, simply calling his business "Behee's Pattern and Wood Working Shop."

Even worse, window screens had become the staple and the Lyric Harp Guitar seemingly a sad afterthought (right).

Who Said We Can't Do It?

Why not, when we have a complete line of brand new, up-to-date machinery and are always ready to do all kinds of mill work, such as plaining, joining, repairing, band sawing, etc. We also make screens to fit your windows and doors.

Thirty-five years' experience in pattern and model making ought to assure first class work in the art of pattern making and in fact all completed work where skilled mechanics are required.

We are also experts on all musical instruments and make a specialty of repairing and restoring old and valuable violins and all other musical instruments. We are sole patentees and makers of the famous Lyric Harp Guitar, which has a reputation of self-introduction wherever it goes.

Come and see for yourself, then give us a Trial.
All Work Guaranteed Perfect Satisfaction.

Behee's Pattern and Wood Working Shop
411 South Fifth Street - - Leavenworth, Kansas.

And then, a boost!

In August 1906, Joseph Behee finally had interest from some Kansas City capitalists for his violin carving machine, and so began work on building more machines while relocating his "factory" to Kansas City. At the same time he set up his violin workforce he could also test market his 12-string lyre guitar in a larger city – and so reverted back to calling the enterprise The Lyric Guitar Co. This was advertised well into 1908, by which time his son Frank, who had followed him into the pattern making field, had become a partner with his dad.

Unfortunately, once again the instruments didn't seem to have panned out. I've found no mention of the violin machines, nor any musical instrument activity at all in Kansas City – just this entry in Polk's 1908 Kansas state business directory. Scant clippings tell us that by the end of 1907 both father and son had reverted to being "prosperous and expert pattern makers" (and that they were enjoying the boat they had built back in Leavenworth).


712 Kansas City, Mo. R. L. POL

The Lyric Guitar Co.

MANUFACTURERS OF

Lyric Guitars Mandolins and Violins

Musical Instruments Old Violins

Artistically Repaired

REPAIR WORK GUARANTEED

2011 E. 15th St.,

Kansas City, Mo.

PATENTED

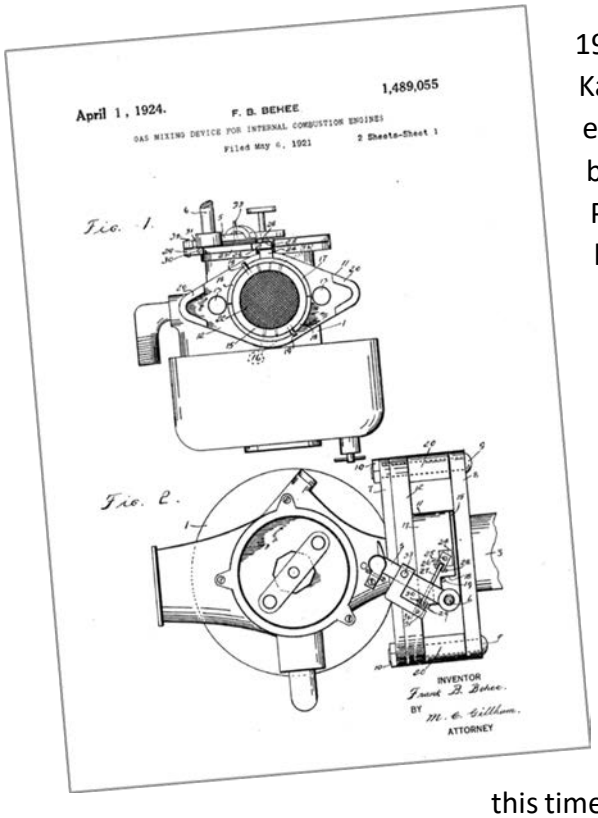
Lyons Bros Millinery Co, C H Lyons pres, E L Lyons vice-pres, J S Lieberman treas, M B Ryder sec, 910 Broadway.
Lyons James E, saloon, 1619 W 12th.
Lyons John, grocer, 2214-2216 Vine.
Lyons M F Ice and Power Co, W F Lyons pres, A A McDonough sec, 517 Bryant bldg.
LYRIC GUITAR CO THE (J H and Frank Behee), Mnfrs' Lyric Guitars, Mandolins and Violins and Musical Instrument Repairers, 2011 E 15th. (See adv.)

This short period marks the end of the Lyric guitars *(for now)* and the temporary end of the violins. How much longer either of the men stayed in Kansas City is unknown, as are their whereabouts for the next several years. We next find Joseph back in Leavenworth in early 1915, by which time he had invented and applied for a patent on "a device by which the front lights of an automobile turn with the front wheels, thus always projecting the light rays straight ahead." He installed the device in several of his Leavenworth friends' cars and they appear to have worked well, but his patent was never granted. Car geeks may recall that a couple decades later Tucker equipped his cutting-edge cars with a similar center headlight swiveling device.

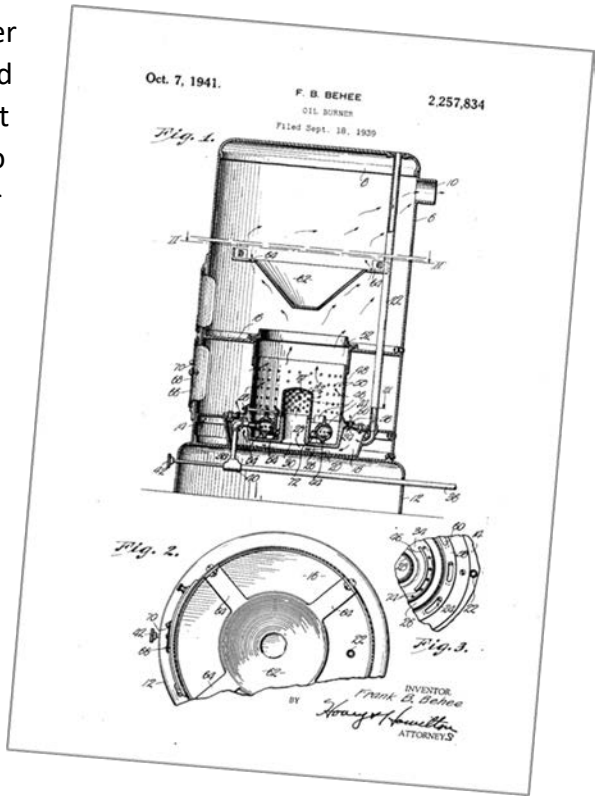
It's now time to pause and catch up with Frank Behee (and don't worry, Joseph Jr. will show up shortly!)

Frank Behee

Franklin B. Behee was born somewhere in the middle of his ten-plus brothers and sisters in 1883. Details of his life remain sketchy, including when he worked for or with his father and his whereabouts during those years. FamilySearch states that he married his wife Mamie Kasten in 1903 in Jackson, Missouri, some distance from Leavenworth; how he found himself there isn't yet known – nor why the same source says the family lived there in 1910. Between those years, their two sons were born in Leavenworth: Harold in 1904 (d.1984) and Russell in 1906 (d.1980). So perhaps he worked with his father in Leavenworth, then Kansas City from 1904 into 1908, then spent some time in Jackson, MO (perhaps the location of his wife's family).


April 1, 1924. F. B. BEHEE 1,489,055
GAS MIXING DEVICE FOR INTERNAL COMBUSTION ENGINES
Filed May 6, 1921 2 Sheets-Sheet 1
Fig. 1.
Fig. 2.
INVENTOR
Frank B. Behee.
BY
M. C. Gilham.
ATTORNEY

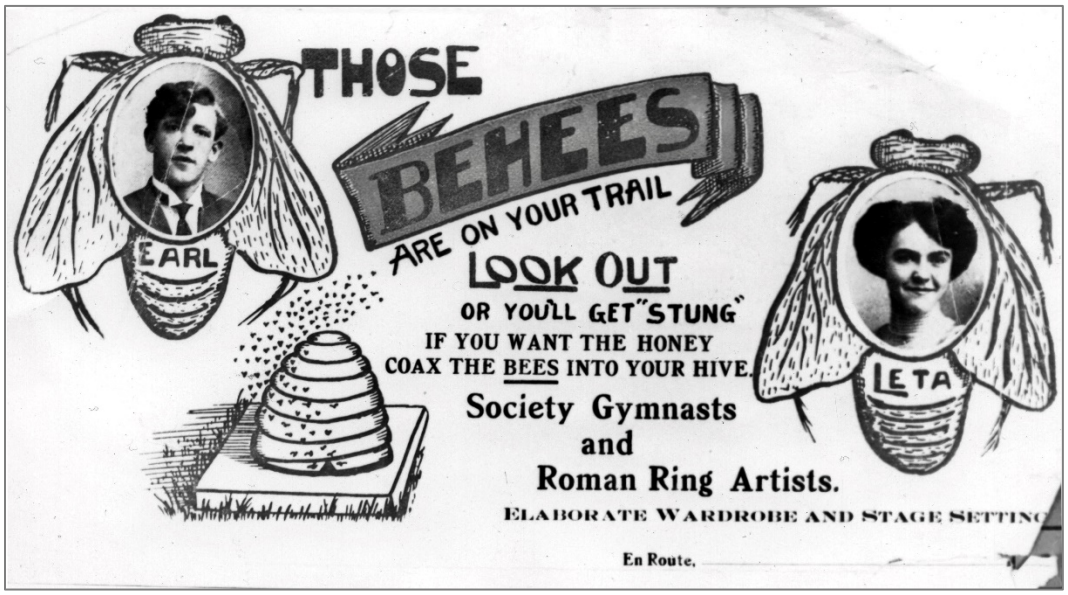
1917 saw Frank move to Independence, just outside Kansas City, MO for a short-lived musical instrument endeavor, the subject of the next chapter. In 1919 he was back in Leavenworth, where he now owned a farm. Presumably he was working again as a pattern maker and, like his mentor father, was a constant tinkerer and inventor in other fields. In 1921 he filed a patent (granted in 1924) for a gas mixing carburetor. According to family lore, while this worked on Ford's Model T, he could never get it to work on the new Model A.


Oct. 7, 1941. F. B. BEHEE 2,257,834
OIL BURNER
Filed Sept. 18, 1939
Fig. 1.
Fig. 2.
Fig. 3.
INVENTOR
Frank B. Behee
BY
Hauger & Hamilton
ATTORNEYS

In September 1939, Frank filed another patent (granted two years later) for an improved oil burner. By this time his two boys had probably followed him into the career of pattern making, both working and living with, or near, their parents in Leavenworth. As seen by the 1940 census of San Gabriel, California in Los Angeles Country, Frank had moved the family soon after he filed his patent in Leavenworth. The story goes that he moved to get his sons away from the bad influence of an uncle (a bootlegger and gambler who was none other than Lee Thomasson's own grandfather Howard Brenneman!).

Interlude: **A Visit to the Circus!**

I would have never known this part of the Behee story if not for the fact that Frank's own son Harold himself spent one full season with "The Flying Behees"! The troupe had a long and complicated history with their members and number occasionally changing. For the complete trail, we need to go back to Joseph H. Behee, Sr. and one of his brothers, Marion (1839-1936). Marion's son Earl, born in 1890, would become a single trapeze artist, while his wife Leta became a bareback rider. Below is a rare flyer from their early act as "Society Gymnasts and Roman Ring Artists" complete with "Elaborate Wardrobe and Stage Setting."



In 1912, Leta gave birth to Clayton Earl Behee, who would go on to become one of the world's greatest flying trapeze artists. Beginning at age *six*, Clayton was performing with his parents and brothers Bob and Raymond in a "ring, cradle and high trapeze act." Lee Thomasson's mother (b.1911) remembered being around their trained goat. In 1929, at just 17 years of age, Clayton formed "The Flying Behees," a "fly and return" act; it was likely at this time that Frank Behee's son Harold spent his single season with his cousins.

In 1934, Clayton Behee left to join the Flying Codonas, to be coached on the triple by the world's greatest flyer at the time, Alfredo Codona. Clayton was soon doing the triple, and the following year was joined by a former Hagenbeck-Wallace Circus trapeze flyer, Rose Sullivan, who had replaced Alfredo's wife Vera. On a 1936 tour through Europe with Lalo Codona (catcher), Clayton and Rose were married in England.

1937 brought tragedy and injury for the Codonas. On July 30th, the former "King of the Air," Alfredo, shot and killed his recently divorced wife Vera, then himself. Then, right at the start of their second year in Europe, Lalo was injured, forcing his retirement. It was the official end of the legendary Flying Codonas.

As always in the circus, "the show must go on." Clayton used the opportunity to resurrect The Flying Behees with Rose and new catcher, Ralph Swisher (at left).

They were well received, and by 1939 had joined the Cole Bros.' Circus, where – as described in a *Billboard* cover article – Rose became "the first and only woman flyer ever to perform a two-and-a-half somersault to a Catch by the feet while blindfolded."

1940 and early 1941 saw the Behees back in the States mostly doing freelance shows, with Swisher replaced at some point by catcher Carl Lasiter. Finally, Clayton's brother Bob rejoined the act by mid-summer when they were booked in Honolulu with the Fernandez Circus.

The trio could not have possibly chosen a more ill-fated gig. The circus was set up at the Schofield Military Barracks, 18 miles from Pearl Harbor, when the Japanese attacked in the dawn of December 7th. The circus was quickly dismantled, the Behees stranded until late February, 1942.

The Flying Behees got their big break in 1944, when they landed with the "Greatest Show on Earth" – *Ringling Bros. and Barnum & Baily Circus!* Their engagement literally began with a trial by fire; they were there when the main tent burned to the ground during a Hartford, CT performance. 168 of the 7000 spectators were killed, the circus' biggest tragedy in history.

Again, they recovered. They were one of four flying trapeze acts in the show (The Flying Concellos considered the "star" act), featured on the May 19, 1947 cover of *Newsweek*. Their blurb inside reads, "Nearest to the hearts of many are the daring young men and women of the flying trapeze. And of these, none are more representative than The Flying Behees. Born of circus parents in Independence, Mo., Clayton Behee began aerial work when he was 6. Clayton's specialty is the triple somersault."

The trio also appeared in the March 1948 *National Geographic* in a story about the "Circus Action in Color" (at right). I can't tell which one is Clayton and which is Bob!

Left: From the Charles Cushman Collection of color photographs of "Behind the Scenes at the Ringling Bros. and Barnum & Bailey Circus."

Rose left the act in 1949, joining what would later become the "Behee-Bray Aerialists," and divorced Clayton in 1950. Thus, the Flying Behees were long gone by the time of Paramount's 1952 film *The Greatest Show on Earth*, which featured many of the actual performers.

Clayton Behee continued circus work with other performers, and late in life continued to work with the circus as a phone promoter until his death in 1976.

The Behee Violin Mfg. Co.

And now it's time for Joseph Henderson Behee *Junior* to enter our story. Joe, Jr. was one of at least two sons of Joe Sr. to become a stonemason, eventually settling in Independence, Missouri.

As mentioned earlier, we don't know if Frank was in Jackson, MO or back in Leavenworth, KS after 1910. We *do* know that Frank surely remembered their efforts at making violins with his dad's original carving machine.

On April 6, 1917, America officially declared war on Germany. The war was raging, and the importation of inexpensive German violins had ceased. Perhaps a light bulb went off in Frank's head; *they* could fill this gap!

OPEN VIOLIN FACTORY

Sons of Old-Time Violin Maker Start Plant for the Manufacture of These Instruments

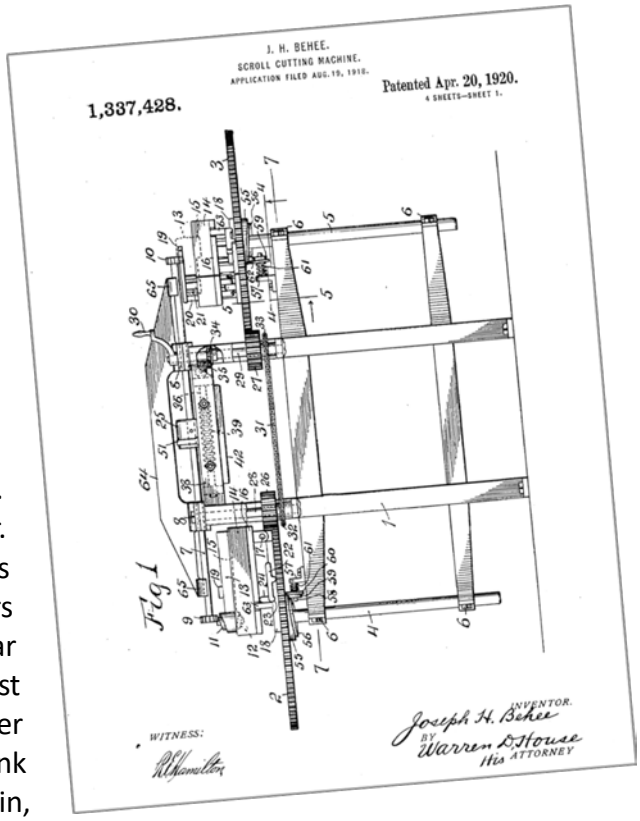
INDEPENDENCE, Mo., November 5.—Frank and J. H. Behee have established a violin factory in this city. Both men are experienced in this line, their father having been an expert workman on violins, and they learned the trade from him. The plant employs fifteen persons at the present time, and can turn out two dozen violins a day. A large number of orders for future delivery are now on hand.

Looking for a partner, Frank undoubtedly convinced his older brother Joe Jr. to join him in the rejuvenated enterprise. If never directly involved, Joe would have been familiar with his dad's lifetime of violin experiments and the first attempt at the machine-assisted factory. And so, with financing from several local Independence businessmen, the Behee Violin Mfg. Co. was born.

Left, from *The Music Trade Review*, November 10, 1917.

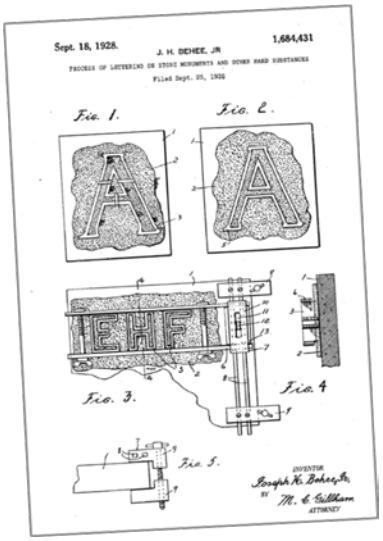
By November, they were up and running with fifteen employees. Their dad's original carving machines were undoubtedly put into service in the sons' new factory to crank out "two dozen" student grade violins "a day" for the wholesale trade. Other family members were employed, including Joe Jr.'s daughter Opal, who sanded and pumiced the instruments.

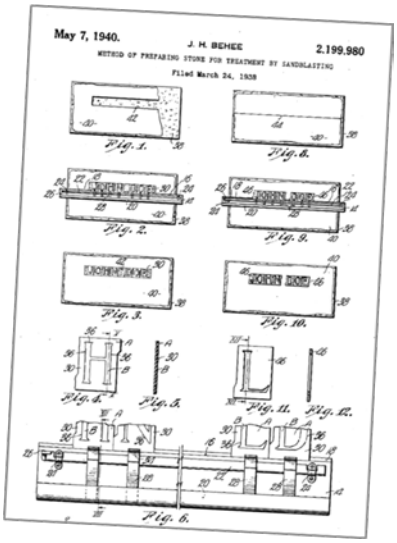
They also enlisted Dad to revive his original idea to create a carving machine for the neck, specifically that time-consuming scroll. And so, he did. In August 1918, the 75-year-old retiree filed the patent for his "Scroll Cutting Machine." The elaborate device at right was created solely "for cutting the scrolls on the outer end of a violin neck."


J. H. BEHEE.
SCROLL CUTTING MACHINE.
APPLICATION FILED AUG. 19, 1918.
1,337,428. Patented Apr. 20, 1920.
4 SHEETS—SHEET 1.
Fig 1
WITNESS:
INVENTOR.
His ATTORNEY

Left: Joseph Behee, Sr. and his wife Mary later in life.

Alas, the timing was terrible. Though Joseph Sr. would get his patent two years later, the war would end just three months after his filing. As Frank would later explain, once the war ended, cheap German imports returned. This, combined with unexpected Japanese production – Suzuki was producing thousands of instruments each year by 1917 – effectively stopped the Behee factory almost before it started, a swift and sorry demise for the new enterprise. They were still listed in the 1920 Independence directory, but were probably closing up shop even then. Little was salvaged or saved, though a collection of tools from the factory ended up in the hands of Joe Jr's grandson Jack Wilson, who still has them. Another family member has the sole surviving Behee factory violin.


Sept. 18, 1928. J. H. BEHEE, JR 1,684,431
PROCESS OF LETTERING ON STONE MONUMENTS AND OTHER HARD SUBSTANCES
Filed Sept. 25, 1926
Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4
Fig. 5.


May 7, 1940. J. H. BEHEE 2,199,980
METHOD OF PREPARING STONE FOR TREATMENT BY SANDBLASTING
Filed March 24, 1938
Fig. 1.
Fig. 6.
Fig. 2.
Fig. 9.
Fig. 3.
Fig. 10.
Fig. 4.
Fig. 5.
Fig. 11.
Fig. 12.
Fig. 6.

Frank subsequently went back to Leavenworth and pattern making and Joseph Jr. to his stonemason work for the duration of their successful careers. In 1926, the year his father died, Joseph Jr. filed for his own first patent; his second would come in 1940. Both were related to the sandblasting of headstones, monuments, etc.

The Behee Lyric Harp Guitar Rides Again (or "Behee, You're Not in Kansas Anymore")

Much of the following information comes from a letter Frank Behee wrote to his brother Bert on April 30, 1958, stories he told his grand-nephew Lee, and childhood memories of Ron Behee, Harold's son and Frank's grandson. I then followed these threads to put together a reasonable timeline and pertinent story points.

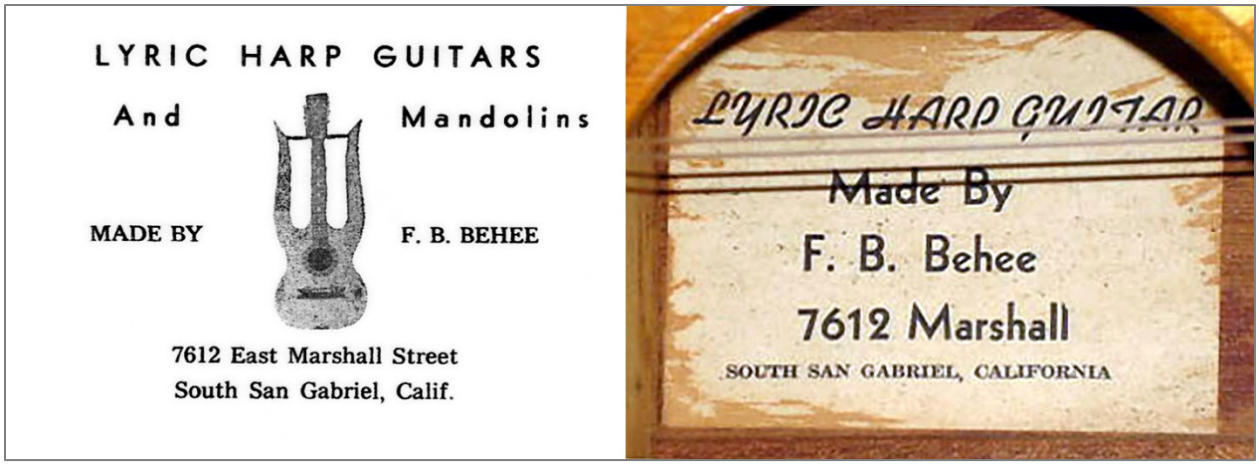
By the 1940 census, Frank Behee, his wife and the two adult sons Harold and Russell were in southern California. Frank and Mamie lived at 1938 Denton Avenue in San Gabriel, later moving to 7612 East Marshall Street in South San Gabriel. He soon opened a new shop with his two sons called Mission Pattern Works at 5526 Alhambra Avenue in Los Angeles, about five miles due west of his later home.

Sometime in the early 1950s, Frank retired and they closed the business, moving the equipment to Frank's garage and a shed in the backyard. While Frank continued to do a few small patterns for some of his old customers, he was ever restless and inventive. One time, he decided (for fun) to build a piano from scratch. Ignoring experts, he built the frame out of hardwood. Sure enough, it went out of tune when the humidity changed. So he completely rebuilt it with a new metal frame he made himself, with "Behee Piano #1" cast into it. It worked and he later gave it away as a wedding present.

Meanwhile, at this moment in time, there happened to be a single surviving original Behee Lyric harp guitar, passed around from brother to brother, eventually ending up with a cousin named Joe Noggle. And so, one fateful day, Joe brought it "in pieces" to Frank to see if he could repair it. Curiously, Frank described it as "one of the Lyric guitars that Dad used to make," We know that he was a partner with his dad in the Kansas City directory – why not "we used to make"? Perhaps Joseph Sr. handled the musical instruments while Frank handled their other jobs?

Regardless, Frank put the instrument back together (sadly, it has since disappeared), and realized his new retirement hobby had just presented itself: he would make brand new Lyric harp guitars! We now know that he had an original to examine and copy, and he appears to have copied it very closely when he made his first examples, probably in 1956. He even made at least one with the original double soundholes, though preferred a single hole. His instruments' body, arms and bridge appear to have been close to his dad's original, including the wide metal bridge stays, which he later substituted with more traditional and delicate rods hinged to a small end piece. He retained the thick wooden dowel threading through a loop on the back of the head to connect the arms, but chose not to copy the V-shaped headstock, leaving it square with just a subtle curve on top. After a couple years, he created his distinguishing

feature – a headplate logo reading BEHEE LYRIC HARP GUITAR. I was struck by the non-traditional construction technique for that, which will be described below.

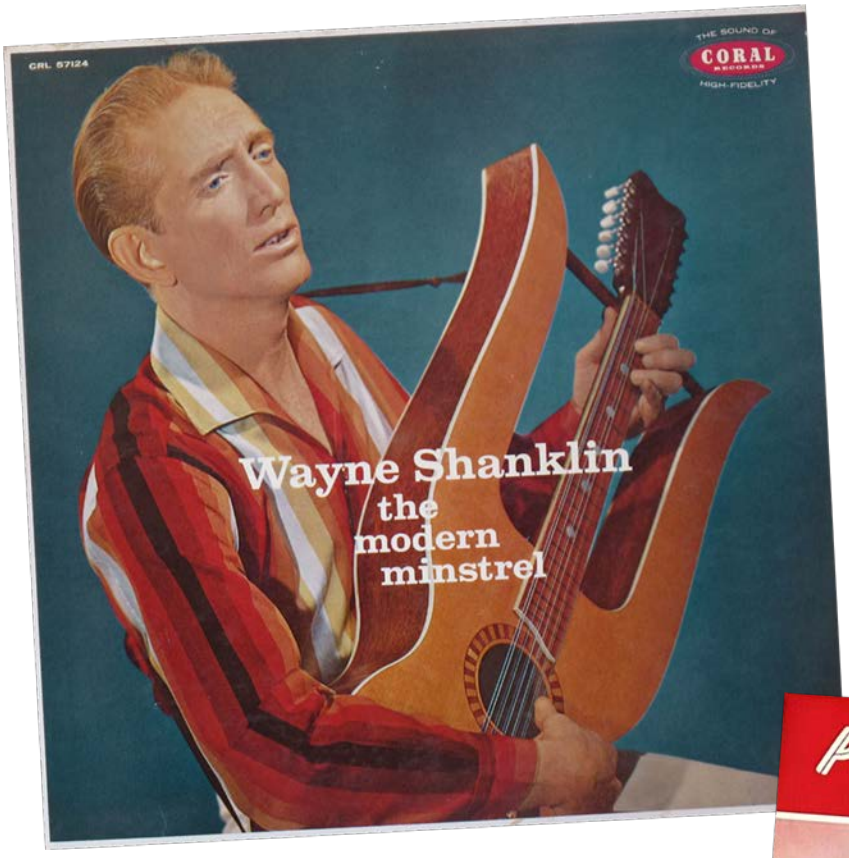


Above, Frank Behee's letterhead and label

What I find of significant historical interest and importance is this: The early 1900s Behee was a *12-string guitar* way ahead of its time. And Frank probably wasn't even aware that the instrument he was now copying in the mid-50s was once again *ahead of its time*. The old 1920s Stellas and their like were all but forgotten. Pete Seeger's "groundbreaking" new 12-string guitar wouldn't be built until 1959, and Gibson's new B-45-12 didn't appear until 1961.

Hollywood singer-guitarists immediately took notice. This weird lyre-shaped "harp guitar" sounded like nothing they had ever heard! By April 1958, Frank had already built "about ten," with more to follow. The owners were as diverse and fascinating as their instruments, so let's meet them!

The Behee Players



One of the first musicians Frank met was Wayne Shanklin, a record producer and popular and successful songwriter. The cover of his 1957 LP record may have been the very first look the mainstream public got of the novel instrument.

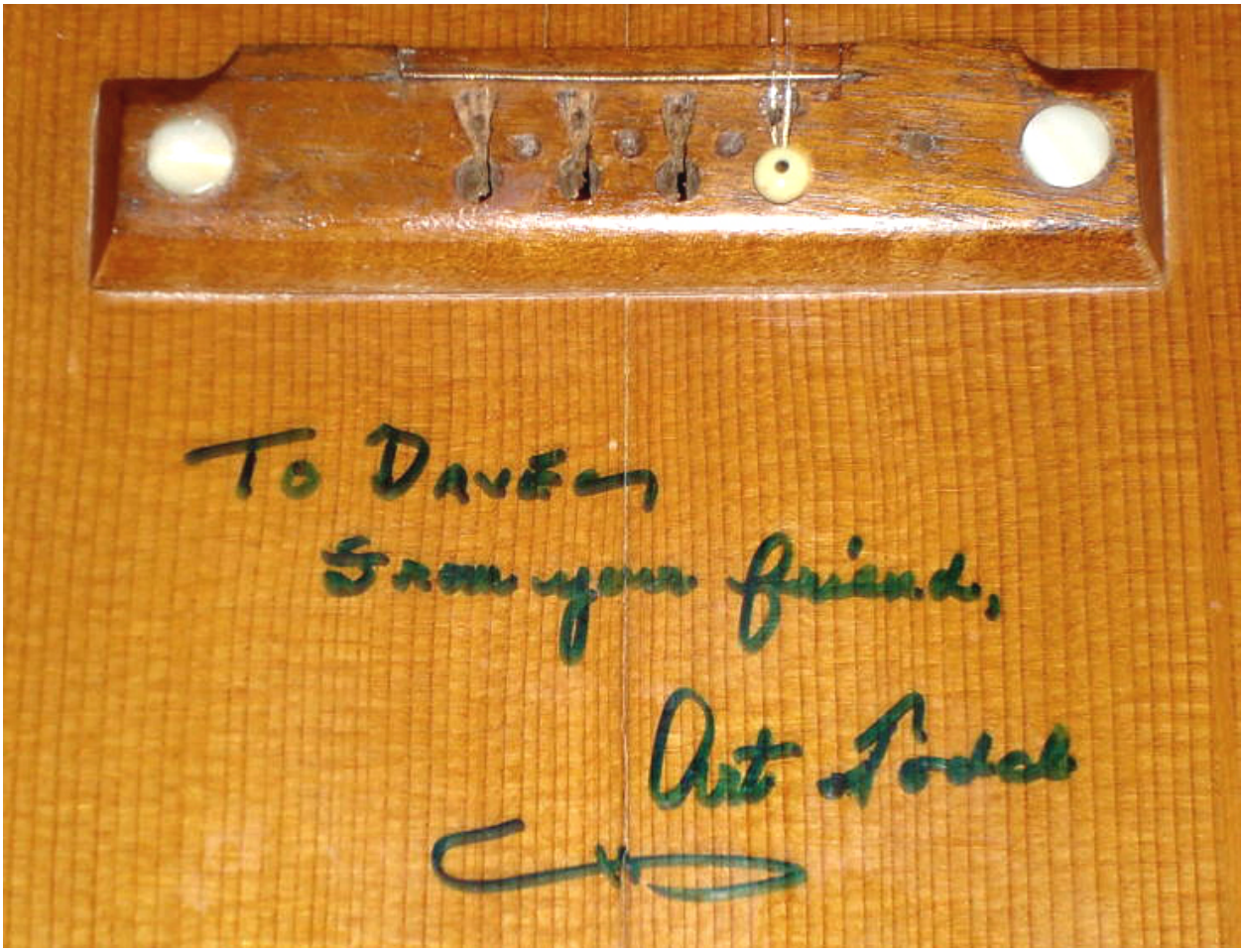
According to Shanklin's grandsons, Wayne eventually owned *four* Behees, one of which was an 8-string (4 double courses) tenor. I suggest that one of the remaining four was the one with a white headplate that appeared in 1958.

One of Shanklin's many popular songs was the co-written "Primrose Lane." Rather than record it himself he sold it to another popular singer, 12 years his junior: Jerry Wallace, who had his first big success in 1958. This was Wallace's second hit song, reaching #8 on Billboard's Top 100, and on the sheet music he cheerfully poses with a Behee 12-string (the sheet music bears a 1958 copyright; the recording was released in 1959). While Wallace would shortly get his own two different Behee harp guitars, this is neither of them. I suspect it was one of Shanklin's, the songwriter having loaned it to his Los Angeles neighbor and new hit pop singer for the photo shoot. (There's a good chance that Shanklin was also involved in producing Wallace's sessions.)

The same instrument appears in the 1961 film *Angel Baby*, which Shanklin did the soundtrack for (publicity still at left). It first shows up in a "Hillbilly band," likely played by Shanklin himself, then later, star George Hamilton in one of his first film roles picks it up to bang out a percussive tent preacher incantation. (The "horned" instrument seems an unusual choice for an evangilist, doesn't it? Maybe the director just thought it looked cool?)

According to one of Shanklin's daughters (via grandson Larry), one of Shanklin's four instruments was stolen and never seen again, while the others remained in the possession of three different Shanklin relatives. In 1996, the 8-string was handed down to grandson Carson Shanklin, the son of Wayne Shanklin, Jr.

Other mid-50s Behee owners included cowboy singer
and movie star Eddie Dean (left) and Art Dodd (right). Dodd's instrument was an 8-string tenor that survived to show up on eBay in 2009.



I wonder if the buyer knows who signed the top or that this instrument appeared on the Ed Sullivan Show?! The story is this:

Art and Dotty Todd were then the resident act at the Chapman Park Hotel in Los Angeles when they had their first hit record in 1958. Once again, it is no coincidence that their hit song “Chanson D’Amour” was penned by Wayne Shanklin, who produced their demo. The song an instant hit, the husband and wife team were invited to perform on the Ed Sullivan Show on April 27, 1958; their segment of Episode 31 was listed as “Art and Dotty Todd demonstrate multi-track tape recording with their song ‘Chanson D'amour’.” They were successful enough to be asked back to repeat the performance two weeks later, and nice enough to alert Frank Behee, who then wrote to his brother to make sure to catch the second appearance of his Lyric harp guitar on national T.V.! Undoubtedly, Shanklin had introduced Todd to Frank sometime earlier, Todd choosing to commission an 8-string tenor like Shanklin’s.

Frank's grand-nephew Lee Thomasson visited the Behees in San Gabriel as a teenager in 1956, and saw Frank again in 1961 and 1962 at his mother's house in Aberdeen, Washington. He remembers that Frank was already retired in 1956, but doesn't think he had yet started building guitars.

On one of the later trips to Washington, Frank brought one of his guitars on the bus. Lee's mother Della bought this instrument for her youngest son, Don (at right, with Frank c.1962), who gave it to Lee before he died.

Frank Behee in April of 1962 with the same instrument at the home of Lee Thomason's mother in Aberdeen, WA.

…and the instrument today:

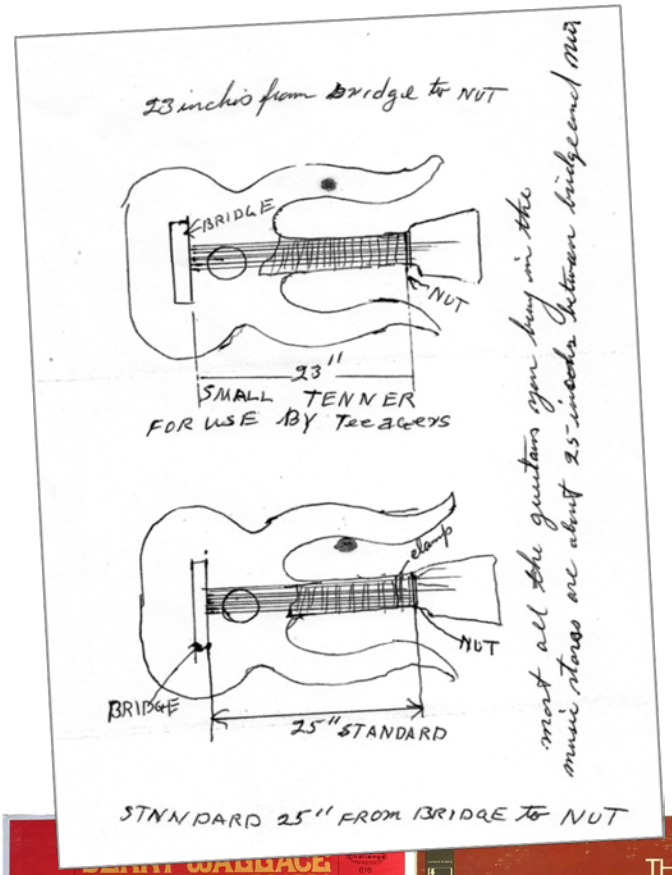
It was at his mother's house in those two years that Frank and Lee shared family stories and Lee learned a few more things about the instruments. When Frank learned that Lee was a radio D.J., he asked Lee if he "ever played any Jerry Wallace music?" Lee answered "Yes, and Wallace's 'Primrose Lane' is my wife Deana's favorite song!"

Frank then related a great story about how Frank had taken "his first guitar" to an L.A. music store in hopes of consigning it and Jerry Wallace, who happened to be there, bought it on the spot for $275, Frank's then asking price (over $2400 today!). He and Wallace became friends and Frank was even invited to watch him record.

As we've already seen, this couldn't have actually been his *first* Lyric 12-string, and Wallace would have already been familiar with the instrument through Shanklin, posing with one in 1958. I wonder if Frank had that part confused with Shanklin?

Regardless, Jerry Wallace *did* buy a brand new Behee, and here it is!

All original, it resides in its case – with Jerry's red label-maker sticker still affixed – in the home of Ron Behee, Frank's grandson. It doesn't appear in any pictures of Wallace, as he had quickly asked to trade it in for a smaller instrument with pickups. By this time, Frank was making two different size guitars based on their scale lengths: one "standard" at 25" and the other a "tenner" at 23" "for use by teenagers." Looking at all the surviving specimens, it actually looks like most were short scale instruments, which were of course played by young adult men.



Left: Frank's simple sketches for his two models. His tenor was still a 12-string guitar, the name independent of common 4-string tenor guitars (or the double-strung version he had already made).

Jerry's second Behee first appeared on the cover of his 1962 album *Shutters and Boards.* He would occasionally include it on his many albums into the 1970s, including the two "greatest hits" LPs. (Note that the image has been reversed in two photos).

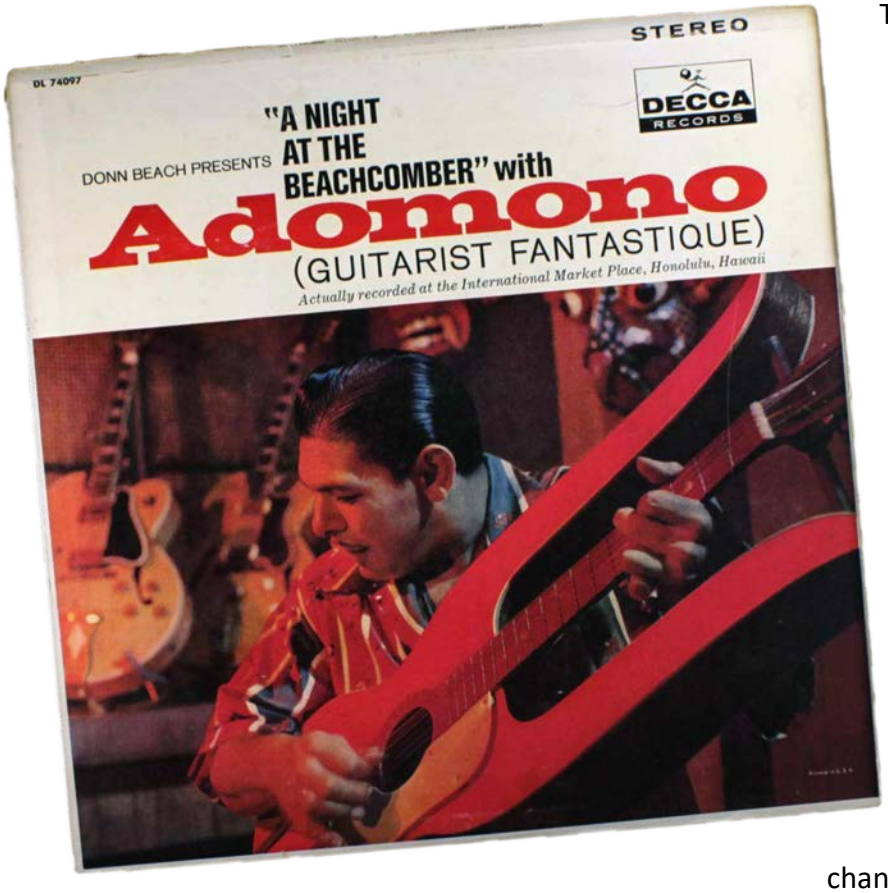
He still has it in the final, white-haired publicity photo (next page).

In some of the images above you can spot the black volume knob…but where is the pickup? Why, embedded into the fretboard between the last two frets! Seen in the third and last image, this was reported by Frank as a Fender pickup, but it can't be, as it has individual pole pieces. Frank explained that one could individually raise or lower the pole pieces for the six strings to dial in the desired sound. Thus, it's probably either a modified DeArmond pickup (like the one pictured) or something like the one Gibson used in their J160E. How it was mounted under the fretboard is unknown.

There are Wallace fans still today. A "pop singer" with many hits between 1958 and 1964, he achieved even greater success when he crossed over into Country. He was "dubbed Mr. Smooth for his warm, velvety vocal approach," with many of his album covers clearly meant to appeal to romantic female listeners. You can see his hair style changes and hear many of his classics on YouTube and elsewhere. I find it fascinating to see the use of his odd-looking Behee spanning both Pop and Country and clean-cut and long hair periods. He later put his vocal talents to a different use, becoming an actor, narrator and voice-over artist before his death at age 79 in 2008.

Meanwhile, Frank Behee's grandson Ron lived across the street from 1956 to 1963, while his mom ran Behee's Market, the corner grocery store. He specifically remembers Frank's backyard shed where he watched his granddad "soaking the wood in hot water and bending it around cylinders heated with gas flames, then placed in forms to shape." It seems that Frank worked on his own; his two sons and ex-partners Harold and Russell remained pattern makers, having no interest in the guitars.

Russell's own two boys were a different story. Ron well remembers his cousins Carl and Russell, Jr. (the sons of Frank's second son Russell; Ron was the son of Frank's older son Harold and his second wife). Ron was about nine when he saw Carl "in his '20s" helping build his own guitar with his grandfather. Interestingly, grand-nephew Lee as a visiting teenager remembers *Russell Jr.* making a guitar with his grandfather. We now think that both of the young men did. Carl's instrument disappeared, but Russell's – likely built a couple years earlier – made its way to Honolulu and onto this album cover!



This is John Adomono, a flashy plectrum guitarist who recorded a live album while at the International Market in Honolulu in 1961. It turns out that Russell had gone into the Navy, and – strapped for cash – sold his Behee guitar while stationed in Hawaii.

The story is that his guitar hung on a wall with other guitars for sale, and Adomono grabbed it for the album cover shot. This cult guitarist, called by some the inventor of "tiki surf music" is discussed on a fan blog. It's worth perusing this interesting "forgotten icon" a bit when you have the chance. On this Waxidermy blog, you can listen to his version of "Flight of the Bumblebee" from one of his three now-rare albums. You can also read an eyewitness Adomono fan's story of how the Lyric was just borrowed from a local shop for the album cover shoot. Indeed, one can see many guitars in the background, as if they went to a guitar store to shoot the pics. Curiously though, one of Adomono's great-grandsons mentioned owning a similar Behee!

Other personal Behee guitars – some likely built for potential sale – include Lee's instrument shown above and a double-hole owned by Ron's brother Dean. So far, it is the only one known with the dual soundholes like the original 1900s instruments:

Frank mostly built 12-strings, but he also made the two tenor 8-strings and at least one mandolin. This electric lyre-mandolin (labeled the "Behee Lyric Mandolin") is owned by Ron:

And now we come to the most famous Lyric Harp Guitar of all. This one even as a name – "the Animal," christened by none other than Phil Spector. It was owned by record producer, musician, composer and publisher Scott Turner (at right: aka Graham Turnbull, 1931–2009), who played it on dozens of famous Gold Star Studios hit records. In a September 2006 article for *Music Morsels*, guitarist Mark Paul Smith tells "The Legend of the Lyric Harp Guitar." The story provides a seemingly endless list of famous recordings that this unusual small amplified 12-string guitar appeared on, including many Spector "wall of sound" recordings. Spector named it "the Animal" partly because of its sound and partly because "of its beastly appearance. The sound chamber of the guitar extends up both sides of the neck in hollow swoops that look like the horns of an antelope."

As for the sound, Spector was immediately drawn to "the amazingly clean ringing" of it, and the fact that "the resulting sound cuts through without the predominant overtones of almost all other 12-string guitars." Turner attributed this to the wooden rod connecting the neck to the tips of the hollow arms, explaining that "String vibrations are transferred to the horns by way of the rod and resonate down to the string vibrations from the body of the guitar." Smith noted that the best example of "this unique tone" can be heard in the four-note lick that opens the 1963 song "Then He Kissed Me" by the Crystals. Here's a representative YouTube clip.

In the article and an even more detailed later video, Turner explained how the instrument came about. His testimony is important, but it's clear that his memory was somewhat faulty and that he was also not privy to all of Frank Behee's output.

"I really can't remember if it was 1958 or 1959 that I asked a retired cabinet maker in California to build me a 12-string version of a guitar that I had seen – a tenor, four-string version that he had made for Wayne Shanklin, an accomplished songwriter in Hollywood. (*GM:* This was more likely in 1962 or even '63. Frank Behee was actually a retired patternmaker; he was never a cabinet maker. As for Shanklin's tenor, Turner actually meant 4-*course* [8 strings].) I do know that it took over five months to build it as he had to let the wood 'age' before he started to work on it. I did have to 'borrow' it before the final sunburst finish was applied because I was asked by the director of a film titled *Hootenanny Hoot* to use it in a scene in the movie. Upon completion, I started to use it on many sixties recording sessions because of its unique sound." Smith then described it further: "The guitar itself is 37 inches long, 13-1/2 inches wide, 3 inches deep, with a sound hole diameter of 3 inches. It has 19 frets with seven mother of pearl circular inlays. The nineteenth fret has six, screw-top pickups as "The Animal" is an electric instrument. Its inside label reads, "Lyric Harp Guitar, Made By, F. B. Behee, 7612 Marshall, South San Gabriel, California. There is no date of manufacture nor any serial number."

We are lucky to have a good record of the Animal's film appearance. *Hootenanny Hoot* was released in 1963, somewhat later than Turner's testimony would indicate.

This blog about the film contains photos and a great clip of a baby-face Johnny Cash, while this YouTube video contains the whole groovy musical segment with the Behee. I'm not certain if that's Turner himself in the film, though I imagine it is. In the stills and video, one can see that his is a typical later Frank instrument, with the laminate headstock logo and tailpiece with the thin support rods. Its black pickup knob is also plainly visible.

A recent series of interviews with Scott Turner by Cyze-O-Graph Music is a goldmine of history on Turner and the instrument, but again, has many inaccuracies to filter through. An overview of Turner's guitars, the Animal begins at the end of Part 1 at 30:10 and continues for the first half of Part 2.

One can better inspect the instrument in the video, and it's obvious that at some point it had been rebuilt and refinished. Curiously, Turner specifically mentions using it in the film "before it got its sunburst finish." Yet Frank Behee didn't make any other guitars with a sunburst finish, nor was it likely that it was something in his skill set. Turner also tells how Frank added the finish "sometime after" the film and passed away twelve days later, which doesn't at all line up with Frank's death in 1971. *If* Frank indeed gave it that finish, then what we're seeing here is a professional re-finish. It could even be an entirely new top (and likely bracing). Note that the instrument looks basically new. The finish is perfect, the bridge has been replaced with one of the same shape while the tailpiece has been left off, and there is no hole where the original pickup control knob was mounted in the top. Frank's headplate veneer laminate has been replaced with wood, and presumably the tuners are new. The fingerboard may also be a replacement, though

it retains the original seven large pearl dots and the same individual string pickups remain in the end of the fingerboard (the controls now hidden elsewhere).

A still from the video

In the videos, Turner provides examples – and more importantly – audio clips of many of the songs he played the Behee on, including one of the first and biggest Phil Spector hits, “You’ve Lost That Lovin’ Feeling” by the Righteous Brothers. It seems he first used it on a Harry Nilsson session at Gold Star, which was when Spector walked in and went wild over it. The sound he and Spector described – cutting through, with few overtones – is apparent throughout the song samples. While not to my modern taste, it is indeed distinctive; at times it sounds to me almost akin to a “tuned tambourine”!

Scott Turner had a career very similar to Wayne Shanklin, who turned him on to the Behee instruments. Shanklin and Turner both worked at Gold Star, Shanklin as a producer and Turner as a session player. It was at Gold Star that Wayne Shanklin himself originated the “flanging” technique. He did it by “placing his thumb on the ‘flange’ of the recording tape reel during vocal playback, which caused the flanging effect when mixed in with the original vocal track.” Another “accidental” new Shanklin “phase shift” invention is described by two engineers who worked with the notoriously “stubborn” Shanklin in this delightful video.

Both Wayne Shanklin and Scott Turner also wrote and performed, but also sold songs, each giving at least one hit to Jerry Wallace (Turner’s was “Shutters and Boards”). In the video, Turner reveals that “the Animal was on all the Wallace records,” though it’s not clear if this was actually his Behee or Wallace’s own (or who played it). Curiously, he mentions Wallace’s Behee having “burned up,” when obviously it didn’t. Despite some inaccuracies, the video series remains a valuable historical record.

Frank Behee's Lyric Instruments: Analysis

Ten years ago, Ron Behee took his instruments to the Phoenix Musical Instrument Museum, where my friend and colleague and then-curator Matthew Hill examined them. I recently shared some of the other photos with him and asked for his take on Frank's instruments. He made several observations I had not hit upon and verified my guess about the curious "desk name plate" headstock logos. Matthew says:

"At first, the Behee harp guitar looks like a strange beast indeed. Frank Behee modeled his mid-century instruments on those built by his father in the early 1900s, but gave them his own twist. The Behee guitar is actually a combination of three different aesthetics. The first and most prominent is the shape of the instrument. The Behee is related to the early 19th century French lyre guitar; not only does it have the distinctive arms of that instrument, it also has exactly the same type of support rods connecting the arms to the neck. However, the Behee guitar has the waisted lower body of a Spanish guitar, while the French instruments typically did not. Another difference is the size of the wings, which are much larger proportionally than most lyre guitars.

"The second design aesthetic of the Behee guitar is that of Mexican guitar making. It is perhaps not surprising that the Behee is a 12-string instrument; although the exact relationship of Mexican 12-stringed instruments to modern 12-string guitars is not completely understood, it is likely that there is a close relationship between the two. Frank Behee's later instruments have certain elements that are very typical of Mexican 12-string guitars. The most obvious is the use of a metal trapeze-style tailpiece, which serves to reduce the pull of the strings on the top. The overly large dot position markers are also typical of these types of guitars, while the inlaid wood block marquetry soundhole decoration is found on inexpensive instruments from Mexico even today. Even more telling is the mustache-styled bridge, a style that is not typical of American-made instruments.

"There is a third design influence, one that is more subtly hidden, yet not surprising when you think about it. And that is the mid-century modern design aesthetic, especially as it was practiced by the mass-producing Chicago guitar makers like Kay and Harmony. The Behee features thick white binding that almost feels outsized for the instrument. The headstock is also outsized to the instrument, not unlike the well-known "Kelvinator" headstocks made by Kay during the late 1950s. However, the most obvious atomic age design cue is the use of engraved triple-laminated plastic on the headstock. This is a material that was ubiquitous from the 1940s to the early 1970s. It was used for small signs of all types, but in particular name plaques such as those found on office doors. Signs were made by taking a blank sheet of plastic and putting it on an engraving machine where the letters were routed through the plastic to the contrasting color underneath. The result was professional looking and allowed for each sign to be custom made. Pretty much any hardware store in America during this time would have been able to make these. Behee was not the only guitar maker to use this kind of material as a headstock overlay: in the late 60s and early 70s, Nashville-based Grammer guitars finished their headstocks in a similar way."

All told, I have so far counted 15 Frank Behee “Lyric” instruments, including those built with his grandsons. With images of 11 of them, here’s the current reference list:

Specimen #	Instrument	Owner	Year built, or date of first appearance	Image	Comments
1	12-string	Wayne Shanklin	1957	Y	Shown on his 1957 album cover
2	12-string	Wayne Shanklin	1958	Y	Likely one of Shanklin's four instruments, as it was used in the 1961 film "Angel Baby" that he did the score for (and may appear in). It looks exactly like the one Wallace holds in his 1958 sheet music cover, again, presumably loaned by Shanklin, the song's co-writer and Wallace's friend.
3	unknown	Wayne Shanklin	unknown	N	Shanklin's third, presumably another 12-string
4	8-string	Wayne Shanklin > Carson Shanklin	unknown	N	Seen by Scott Turner and called a "4-string", this was inherited by Carson Shanklin from his father Wayne Shanklin, Jr., and confirmed an 8-string.
5	8-string	Art Dodd > eBay	pre-April 1958	Y	Definitely a *second* 8-string as Carson Shanklin inherited Wayne Shanklin's.
6	unknown	Cowboy Dean	pre-April 1958	N	Frank wrote that he had built "about 10" by this point!
7	12-string	Russell Behee > sold in Hawaii	c.1958	Y	Russell’s might have also been built pre-1958. It later appeared on the Adomono LP cover.
8	unknown	Carl Behee	unknown	N	Ron Behee saw Carl building one. Carl passed away early and its location is unknown.
9	12-string	Jerry Wallace > Ron Behee	c.1959	Y	This was Jerry Wallace's first instrument, never photographed with him as it was quickly traded in.
10	12-string	Frank Behee > Lee Thomasson	c.1959	Y	Frank sold to Lee's mom for her son Don, who passed it on to Lee.
11	12-string	Dean Behee	c.1960	Y	So far, the only double hole instrument
12	Mandolin	Ron Behee	unknown	Y	Original owner unknown
13	12-string	Jerry Wallace	1962	Y	Wallace's second instrument that appeared on several album covers and publicity photos. His long-time guitar, current whereabouts unknown.
14	12-string	Carol (private party)	unknown	Y	Very similar to Wallace's second instrument. The only "lost" instrument that this could be is Carl Behee's. All other unseen instruments were of the earlier build style. It is more likely a different, distinct instrument built for persons unknown.
15	12-string	Scott Turner	1963	Y	Built by the 1963 film "Hootenanny Hoot" and later given a sunburst finish. Has since been completely rebuilt.

In studying and arranging the known instruments for this article, I observed the “evolution” of Frank Behee’s short output, which compares like this:

Second from left is one of Joseph H. Behee’s original instruments from 1906. You can just make out that it is nearly identical to the one his daughter Alice is pictured with, including the twin soundholes and a rectangular bridge with wide metal support straps mounted over the top of the bridge. Note the elegant curves of the arms meeting the neck. I believe the next three instruments represent Frank’s first attempts to copy the original instrument that he had on hand. These would all be *pre*-1958. His instruments were just a little wider than the original, with the inner side of the arms turning sharply to meet the neck at about 90 degrees. He used a similar rectangular bridge and copied the metal straps. For the 8-string, 4-course tenor, he left the straps off, as it had less string tension (it’s of course possible that they were there and were removed). Most noticeably, he left out the “V” of the original headstock, using a squared off end with a subtle curve. Headstock veneer is plastic laminate (possibly wood for Shanklin’s first), but there is as yet *no* logo during this period. His entire output features large dot fret position markers and a blocky “Mexican-style” rosette. Difficult to assess is the size and playing scale of these instruments. To me, it looks like these first three have the shorter 23” tenor scale length.

These next two – which we know are 25” scale guitars – might be considered “transitional” instruments, built c.1959 by my guess. Russell’s is on the left, Lee’s on the right. Both still have the sharp arms-to-neck transition. But Frank now switched to his carved mustache-style bridge, and he (or the grandsons) started adding white plastic pickguards screwed to the top. Already using plastic laminate for the head veneer, he experimented with a separate engraved logo piece on Lee’s.

These instruments represent the post-1959 changes, shown in possible order by date. Most significantly, Frank has given the arms a much deeper, rounded bend to meet the neck. He continued using his carved bridge now until the end. Interestingly, he then decided to build a double soundhole version; so far, the only one known.

Note that the first two retain the wide metal bridge straps, while the differently-shaped white pickguards followed those above. All of these now have the headstock logo engraved into white or faux wood grain plastic laminate. The earlier ones have the text in line with the neck; he then angled the logo for the last four instruments. At the same time, he also transitioned to a more traditional tailpiece, which he could have bought from a supplier or copied and made himself. The sunburst instrument is the rebuilt version of the movie instrument to the left.

On this series, the fingerboard dots remained large while he added them at the ends of his bridges. The fret marker patterns vary in count and whether single or doubled on certain frets, and he sometimes used green plastic dots.

The two specimens at left have longer arms, as they have the longer 25” scale; the three at right have his shorter 23” scale. (Remember when Jerry Wallace switched to a shorter scale? We’re seeing that in his two instruments here.) Frank also widened the bodies further for this later “tenor body” series.

The last blonde specimen was the first and only one of these I ever saw in person – in mid-2003, before the days of Harpguitars.net. That was when I had The Knutsen Archives going, through which a local woman named Carol found me. I remember meeting her at a Hollywood Denny’s to look it over and taking these poor photos out in the parking lot.

It was of somewhat unorthodox construction from top to bottom, and I immediately spotted the multi-ply-bordered tuner slots and engraved-through logo in the plastic laminate headstock that Matthew describes above. Though heavily constructed, the top and body had warped over time, and the wooden yoke on the arms had taken the neck with it, rendering it fairly unplayable. While Frank Behee told his grand-nephew Lee that "the rod and arms gave his guitars 30% more volume," I found the instrument to be pretty quiet.

Conclusion

While I was admittedly not the proper connoisseur for Carol's instrument, other players – all those Hollywood stars above – were not dissuaded by either quality, playability, looks or sound. They *loved* them. No less than Phil Spector found it the ideal sound for his groundbreaking recordings.

Additional testimony that Frank included in his 1958 letter, includes these remarks:

"Many of the guitar players like them" because they "sound more like a harp than a guitar."

"When the boys get ahold of my guitar, they lay the Gibson guitar down." (Gibson, then the leading brand of guitar, had not yet introduced their own 12-string, so Frank was describing comparisons to 6-string acoustic guitars.)

"Several large music stores offered to sell them," but Frank's profit margin didn't work. He said that his material costs and time totaled $200 per instrument, from which he sold direct to musicians for $250 or $275. Compare this to the cost of Gibson's B-45-12 which was just $239 retail in 1961!

Frank at his San Gabriel home.

I hope you've enjoyed this journey into the untold story of the "Behee Lyric Harp Guitar" – though not a true harp guitar, a memorable slice of "hollow arm guitar" history!

Acknowledgements

For the dedicated Lyric Harp Guitar scholar or Behee genealogist, there is a vast amount of unfinished research still out there. For example, one of the descendants Lee found was a plastic mold maker who made all the shells for the first Apple computers. That person's aunt (Lee's cousin) was an engineer for McDonald Douglas, flew a Cessna 150 and was a photographer, artist and genealogist. The Behee family and their stories continue to grow.

This article was written (and re-written a couple times over the years) with the crucial help of:

Lee Thomasson, grandson of Alice Behee, one of Joe Sr.'s daughters. Lee's been sending me emails and mailing me rare photos and documents since 2017. He was 80 years old as of 2021.

Ron Behee, grandson of Frank Behee by way of his son Harold. He first emailed me in 2012.

Carson Shanklin, grandson of the first Frank Behee guitar owner, Wayne Shanklin, a largely forgotten but huge part of Hollywood music and recording history.

Larry (no last name), another grandson of Wayne Shanklin, lineage unknown (whose email address has since expired).

Scott Turner, another unsung legend of Hollywood music history, co-writer of songs with Buddy Holly. He was gone before I realized it would be great to interview him, but he left valuable interviews in print and video recordings.

Matthew Hill, PhD, for guitar brainstorming and technical assistance.

About The Author: Creator and Editor of Harpguitars.net Gregg Miner has been fascinated by harp guitars since the early 1970s. He purchased his first instrument (a 1916 red sunburst Gibson) in 1983, then fell in love with the harp guitars of Chris Knutsen when he found his first one in 1988. He collects harp guitars, researches harp guitars, writes about harp guitars, plays harp guitars, produces harp guitar CDs, buys and sells harp guitars, and runs Harpguitars.net, Harp Guitar Music and the Harp Guitar Foundation. You would think that by now he would be sick of harp guitars, but he is not.

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