A fretted, 4-string bass tuned like a standard double bass was developed in the early 1900s for use in American mandolin orchestras. Generally, instruments of this sort were about five feet (153 cm) long from the top of the headstock to the end of the body and close to two feet (61 cm) across at the lower bouts. The term mando-bass was adopted to describe these instruments because they were created to provide a deep bass voice for the American mandolin family, sometimes called the “plectral choir.”

In 1911, at the American Guild of Banjoists, Mandolinists and Guitarists’ (the Guild) annual meeting, issues related to the mando-bass were among the first discussed. Published minutes from that event included an entry about bass mandolins developed in Britain. A letter from English banjo-maker Clifford Essex, relating to recently invented mando-basses, was read to Guild members. Essex explained that his country’s plectrum basses had either three or four-courses and they were tuned in fifths. These instruments sounded two octaves lower than a mandolin at G D A (3-2-1) or G D A E (4-3-2-1) and were essentially contra-bass mandolins.

Soon after the Essex letter was read aloud, George D. Laurian from the Gibson Mandolin - Guitar Company addressed Guild members. Laurian announced that his department had developed a bass for the mandolin family that would be tuned like “the last four strings of the guitar.”

Within a year, at the Guild’s next annual meeting in April of 1912, four companies displayed their own versions of America’s first mando-basses. The new instruments were sold under the brand names of Leland, Gibson, Vega and Wm. C. Stahl. Fortunately for fretted-instrument historians, all four companies published print advertisements displaying their new inventions.

A 1912 Leland product catalog included a photograph of a woman playing what the Leland copywriters called a “bass mando.” The caption to the photo explained that the player was using “proper technique.”

Another photo from the same Leland catalog offers a comparative perspective of their mando-bass. It shows the Leland mandolin and guitar family in profile with the mando-bass at the center. From left to right there appears to be a piccolo mandolin, a mando-cello, a slim-bodied guitar, a smaller guitar, a tenor mandola and finally a Leland mandolin.

Gibson Company advertisements from the early 1900s reveal an approach to mando-bass advertising markedly different from their competitors. Gibson showed their instruments being played by musicians in large groups. The photo below, used in an “Everyone a Gibsonite” ad in 1912 is one such example. There is a not too subtle implication that playing a Gibson leads to social acceptance and hints that if you play a Gibson, you might find your photograph in a national magazine ad.
Another of the four mando-basses that debuted at the 1912 Guild meeting was produced by the Wm. C. Stahl Company. Curiously, Stahl mando-basses did not closely resemble the artist’s drawing used in the Wm. C. Stahl advertising campaign. In the image series below, the drawing on the left was regularly used in Stahl ads. The photos to the right are of an existing Stahl mando-bass.

The fourth fretted-instrument manufacturer that presented a mando-bass to the Guild in 1912 was the Vega Company. Vega’s earliest mando-bass ads show a variety of instruments in an informal
mandolin-family portrait layout. The photo below was part of a ½ page advertisement in the August 1912 edition of the *Crescendo* magazine. With the mando-bass nearly the full width of the picture frame, there is a bowl-back piccolo mandolin in the background, a bowl-back mandolin on the left, and then Vega’s “lute” style mandolin, tenor mandola, and mando-cello.

**The Vega mando-bass**

The Leland, Stahl and original Vega mando-basses had scroll headstocks. The Gibson and most of the mando-basses that came later had flat headstocks. One exception was an instrument made for the O. Pagani Brothers of New York.

The Pagani design was interesting, but not typical of American mando-basses. The fixed bridge, the butterfly inlay, the carved crescent moon on the soundboard and eight strings separates the Pagani from otherwise comparable instruments of the mandolin orchestra era. Among the things that make the Pagani different is that with its double-string courses and shorter neck, it could be called a contra-bass mandolin.

**The O. Pagani contra-bass mandolin**

As a contra-bass mandolin, the tuning setup is two octaves below a mandolin. A paragraph in a Gibson Co. advertisement in the August 1911 *Crescendo* magazine compares mando-bass and contra-bass mandolin tunings: “When the Mando-bass is tuned in fourths, the different notes that would fall at the fifth fret on the lowest three strings (fifth tuning), are easily duplicated by the highest three strings played open and the notes that would fall at the sixth fret on the lowest three strings (fifth tuning), are easily duplicated by the first finger on the first fret of the highest three strings. This is equivalent to adding six notes to the first position.”
The most popular mando-basses

The two most successful mando-bass makers were Gibson and Vega. The most easily identified and most plentiful of the existing American mando-basses today were made by the Gibson Mandolin-Guitar Company of Kalamazoo, Michigan. That is not to say that there is a plentiful supply of vintage Gibson mando-basses. In fact, Gibsons are simply less rare than other types of mando-basses.

The Gibson “J” mando-bass

The first photo in the series on the left shows a narrow bar attached at the bridge and at the upper side of the bass. That bar functioned as an armrest for plectrum players. The mando-bass in the center has a Gibson mando-bass armrest with a sharper curve than the one on the left. It appears that the armrest on the left is attached to the bridge at the “E” side. The center mando-bass’ armrest is clearly attached to the bridge on the “G” side. The last mando-bass armrest design change that Gibson offered is depicted on the mando-bass on the right. Oddly, that improvement appears to block access to otherwise playable portions of the strings. The picture also reveals that the approach to playing the mando-bass at that time varied.
During the depression years in the United States, Gibson branched out and created a less expensive brand of fretted instruments that were supposed to attract buyers who appreciated the Gibson look but could not afford the cost of Gibson quality. The name of Gibson’s off-brand guitars and mandolin family instruments was Kalamazoo. The “KJ” Kalamazoo mando-bass looked like a Gibson “J” except that instead of an oval sound hole, it had f-holes. The Kalamazoo line never approached the popularity of Gibsons, but Kalamazoo sales did bring Gibson some revenue from a segment of the population that was otherwise inaccessible to Gibson marketing.

The Vega mando-bass

The only company that created two markedly different mando-bass designs was the Vega Company of Boston. Their first mando-bass design was developed in 1912. It easily identified by what has come to be known as a “cylinder-back.” The Vega company concept of the curved rise on the back, running longitudinally from the heel to the butt of the body was patented for Vega by David L. Day (#44838). Years earlier, Day worked on a similar mandolin design for instrument manufacturers Howe-Orme, of Boston.

Described in its patent as an “ornamental” improvement, the cylinder-back feature offers a unique flat-back option to the Neapolitan bowl-back design. The Vega cylinder-back mando-bass has a raised, star-form rosette, a scroll headstock, and a two-point body. The “two points” being the upper bouts.

The Vega mando-bass

In the photo series above, the first two images show a spruce top, mahogany back and sides, cylinder-back mando-bass. Vega cylinder-back mando-basses were also made with a spruce top, curly maple back and sides with no binding on the top. The two pictures to the right show front and rear views of a
“flat-back” Vega mando-bass made in 1920. The flat-back design has a larger body and lighter construction than the cylinder-back. It has a spruce top, mahogany back and sides, and no binding. Repairs to the flat-back mando-bass in 1986 left the instrument with Schaller tuners and a new tail-piece. The neck block on all Vega two-point instruments extends from the neck joint to the tip of the upper bouts. The block’s outer edges are exposed and finished to blend in with the sides.

Guitar-shaped mando-basses and others

Not all mando-basses from the mandolin orchestra era looked like mandolins. One of the first American versions of a guitar-shaped mando-bass was the H. F. Meyers’ Contra-Bass Guitar. In a published testimonial from an H. F. Meyers ad, an unnamed author wrote, “... it is an honest instrument, unpretentious, yet good looking, - of a very appropriate design for a mandolin orchestra. It appears to be well yet simply made and the neck is not so terribly thick that none but a giant can hold it with ease.”

Meyers and Prairie State mando-basses

The mando-basses on the far left and center are probably examples of the Meyers brand. The bass on the far left looks exactly like the contra-bass guitar in Meyers’ ads. The mando-bass in the center position has no binding at the sound hole nor on the edges of the top and only the frayed edges of an identifying label remain. A comparison of the label remnants on this instrument to an intact Meyers’ mando-bass label in the future will help confirm its origin.

The other guitar-shaped mando-bass sample in this series was built by the Chicago-based luthiers August and Carl Larson. The instrument on the right has no brand markings, but the Larson brothers expert Robert Hartman has identified this mando-bass as a Prairie State instrument. In his book, “The Larson Creations,” Hartman wrote, “It is a Prairie State [mando-bass] because of its steel support tube spanning the length of the body interior and the smaller rod hooking around the heel of the neck as seen in the guitar patent [August Larson - #1,889,408] of 1930.”

Less common mando-basses

In the photo series to the left, the first photo shows what is most likely a one-of-a-kind mando-bass. The builder and present location of this mando-bass are unknown. The image is a detail from a 1923 group portrait of a mandolin orchestra.

The two-point mando-bass on the right was made by the Favilla Brothers of Brooklyn, New York. That company made a variety of fretted-instruments between 1894 and 1986. This mando-bass has a spruce top with an inlaid pick-guard, a mahogany back and sides, a rosewood fingerboard and a rosewood headstock veneer. The vibrating
The Greenwood mandolin and mando-bass

Not long ago in the United Kingdom, a mando-bass conception scenario played out on a small scale. The following description of that situation may provide insights into what was happening in American luthier shops one hundred years ago.

In 1992, English luthier Robin Greenwood was asked to come up with a design for a mando-bass.

In a recent email correspondence, Greenwood wrote about that experience: “I basically worked with the customer, we scaled my flat-back mandolin up til it was bass size. After that, he decided to increase the body size by 5 inches.”

Rather than follow the neck and fingerboard dimensions of early 20th century mando-basses or try to come close to the vibrating string length of a ¾ upright bass, Greenwood sized his bass’ neck with the Fender precision bass as a model.

The sound-hole close-up on the lower right of the composite photo above shows a fingerboard extension that was added by the second owner of the mando-bass in order to facilitate a new finger-style playing technique. English musician Hilary James chose not to play the mando-bass in the traditional way with a pick, instead she developed a performance approach that is a cross between violoncello and upright bass technique. For this article James wrote the following about her experience with the Greenwood bass.

“. . . it [the Greenwood mando-bass] came with a couple of felt plectrums and a retractable spike on the side. After some experimentation I realized I needed to play the mando-bass like a double bass or 'cello, in an upright position, and so had the spike moved to the base of the instrument. I also preferred to pluck the strings with my fingers rather than use a plectrum, but I began having pains in my right hand, particularly after tremoloing, which I do with my two forefingers. I added an extension to the finger board which passes over the soundhole . . . to anchor my plucking hand.”

If there is a demand for mando-basses in the future, luthiers would do well to have learned from the craftsmen who built these instruments long ago. Mistakes and innovations were made in the past when manufacturers turned their attention to fabricating a bass voice for the mandolin family. With all the creativity, knowledge and ingenuity of craftsmen today it is very likely that the ultimate mando-bass, not yet built, would be a valuable contribution to American mandolin-family instruments.
Below is a table that provides an at-a-glance comparison of certain physical dimensions from a variety of mando-basses discussed in this article that may help in establishing guidelines for building a better mando-bass in the future.

### Mando-bass dimension comparison table

<table>
<thead>
<tr>
<th>Brand</th>
<th>Shape or model</th>
<th>Overall length</th>
<th>Body length</th>
<th>Vibrating E - String length</th>
<th>Body depth at butt</th>
<th>Upper bout width</th>
<th>Width at waist</th>
<th>Lower bout width</th>
<th>End pin holes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gibson*</td>
<td>J - model</td>
<td>62 ⅝&quot; 159 cm</td>
<td>33 15/32&quot; 85 cm</td>
<td>42 ½&quot; 108 cm</td>
<td>6 17/32&quot; 17 cm</td>
<td>NA</td>
<td>NA</td>
<td>32 ⅛&quot; 83 cm</td>
<td>2</td>
</tr>
<tr>
<td>Robin Greenwood</td>
<td>Cittern</td>
<td>58⅝&quot; 148 cm</td>
<td>37⅛&quot; 95 cm</td>
<td>34&quot; 86 cm</td>
<td>9⅝&quot; 24 cm</td>
<td>NA</td>
<td>NA</td>
<td>30 ½&quot; 77 cm</td>
<td>2</td>
</tr>
<tr>
<td>H F Meyer</td>
<td>Guitar</td>
<td>59&quot; 150 cm</td>
<td>35&quot; 89 cm</td>
<td>42 11/16&quot; 108 cm</td>
<td>5&quot; 13 cm</td>
<td>16 ½&quot; 41.9 cm</td>
<td>14&quot; 36 cm</td>
<td>24 ⅝&quot; 61 cm</td>
<td>2</td>
</tr>
<tr>
<td>Prairie State**</td>
<td>Guitar</td>
<td>57 ½&quot; 146 cm</td>
<td>29 ¾&quot; 76 cm</td>
<td>39 3/16&quot; 101 cm</td>
<td>6 ½&quot; 17 cm</td>
<td>18&quot; 46 cm</td>
<td>14&quot; 36 cm</td>
<td>24&quot; 61 cm</td>
<td>2</td>
</tr>
<tr>
<td>Wm C Stahl</td>
<td>Lute</td>
<td>66 ⅔&quot; 168 cm</td>
<td>40&quot; 102 cm</td>
<td>42 ⅔&quot; 107 cm</td>
<td>5 ¼&quot; 13 cm</td>
<td>NA</td>
<td>NA</td>
<td>27 ¼&quot; 69 cm</td>
<td>2</td>
</tr>
<tr>
<td>Vega</td>
<td>2-point Cylinder -back</td>
<td>62 ⅝&quot; 159 cm</td>
<td>37 ⅔&quot; 94 cm</td>
<td>37 ⅜&quot; 95 cm</td>
<td>7 ¼&quot; 19 cm</td>
<td>17 ¾&quot; 45 cm</td>
<td>16 ⅝&quot; 42 cm</td>
<td>27 ⅝&quot; 69 cm</td>
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<tr>
<td>Vega</td>
<td>2-point Flat- back</td>
<td>63 ⅝&quot; 161 cm</td>
<td>35&quot; 89 cm</td>
<td>43 ⅞&quot; 110 cm</td>
<td>7&quot; 18 cm</td>
<td>17 ⅜&quot; 45 cm</td>
<td>17 ⅜&quot; 45 cm</td>
<td>26 ⅝&quot; 66 cm</td>
<td>2</td>
</tr>
</tbody>
</table>


** excerpt from “The Larson Creations” by Robert Hartman, (1990)

The chart below lists diameters of mando-bass strings. American commercial string producers appear to have adopted a standard that may or may not produce the best sound. The late custom string maker, Joseph Valentich made strings of different gauges for the Vega flat-back and the H. F. Meyers mando-basses included in the ‘dimension comparison’ table above. Some commercially produced acoustic bass guitar strings have diameters that are close to the Valentich string sizes.

### Mando-bass string diameters in inches

<table>
<thead>
<tr>
<th></th>
<th>E</th>
<th>A</th>
<th>D</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>D’Addario</td>
<td>.130</td>
<td>.097</td>
<td>.063</td>
<td>.049</td>
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<tr>
<td>La Bella</td>
<td>.130</td>
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<td>.063</td>
<td>.049</td>
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<tr>
<td>Valentich - custom</td>
<td>.096</td>
<td>.075</td>
<td>.066</td>
<td>.045</td>
</tr>
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