

No. 616,908.

Patented Jan. 3, 1899.

J. ENGLUND.
COMBINED GUITAR AND MANDOLIN.

(Application filed Feb. 28, 1898.)

(No Model.)

Fig. 3.

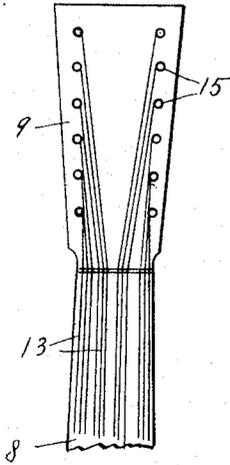


Fig. 4.

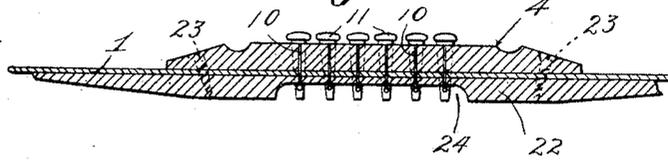


Fig. 1.

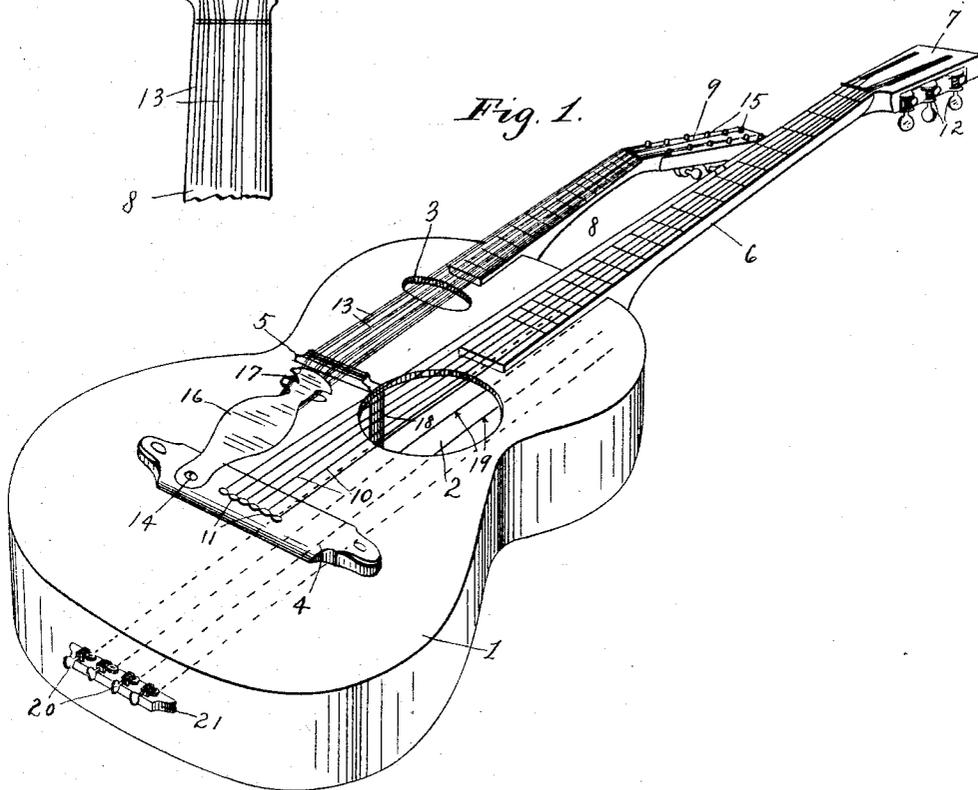
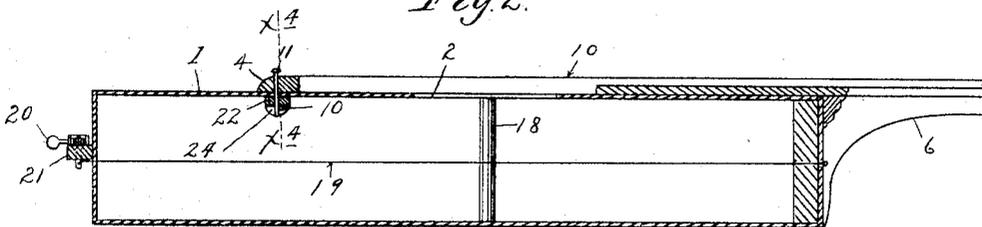


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN ENGLUND, OF MINNEAPOLIS, MINNESOTA.

COMBINED GUITAR AND MANDOLIN.

SPECIFICATION forming part of Letters Patent No. 616,908, dated January 3, 1899.

Application filed February 28, 1898. Serial No. 671,885. (No model.)

To all whom it may concern:

Be it known that I, JOHN ENGLUND, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in a Combined Guitar and Mandolin; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to stringed instruments, and has for its primary object to provide a combined guitar and mandolin of improved construction and having better tone qualities than previous instruments of this general character.

To the ends above indicated, my invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The preferred form of my invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a perspective view of the improved instrument. Fig. 2 is a vertical longitudinal section of the said instrument. Fig. 3 is an enlarged view of the head and a portion of the neck of the mandolin part of the instrument, and Fig. 4 is a transverse vertical section taken on the line $x^4 x^4$ of Fig. 2.

1 indicates the shell-like body of the instrument, which has the general form of an ordinary guitar-body, but which in this particular instance is somewhat widened or swelled out on one side to adapt the same for the combined use of a guitar and a mandolin body.

2 indicates a large sounding-hole such as is usually provided in a guitar, and 3 indicates the sounding-hole of the mandolin-section, both of which sounding-holes are of course cut in the top of the guitar or instrument body 1.

4 indicates the anchor-bar, which in this instrument serves as an anchorage for the mandolin-strings as well as for the guitar-strings.

5 indicates the bridge for the mandolin, which, as shown and preferred, is glued to the top of the instrument approximately in

line with the longitudinal center of the sounding-hole 2.

6 indicates the guitar-neck, provided with the head 7, and 8 indicates the mandolin-neck, provided with the head 9. 10 indicates the guitar-strings, which are secured or anchored to the anchor-bar 4 by means of pegs 11 and are wound on and tightened by keys 12 on the head 7.

13 indicates the mandolin-strings, which, as shown, are anchored to the bar 4 by a common peg 14 and are wound on and tightened by keys 15 on the head 9.

16 indicates a hand-rest or guard formed by a thin plate of metal. At one end it is secured by the peg or screw 14, and at its other end it is provided with prongs or fingers 17, that interlock with the mandolin-strings.

18 indicates a sounding-post which extends from between the top and bottom of the instrument-body and is positioned directly under (or approximately so) the inner end of the mandolin-bridge 5. This sounding-post is very necessary in order to prevent the top of the instrument from being caved or bulged inward by the strain of the mandolin-strings, inasmuch as the top is very much weakened at this point by the sound-hole 2. Furthermore, as I have demonstrated by experiment, this sounding-post 18, located as described, very much improves the tone of the instrument.

A great deal of difficulty has been encountered in permanently securing the anchor-bars of guitars to their tops. As hitherto constructed they were usually glued to the tops and were very liable to be pulled loose by the constant and heavy tension of the strings, and, furthermore, the tops were often distorted or pulled out of shape by this tension from the strings. I obviate this difficulty by placing a reinforcing-bar immediately under the exterior anchor-bar and on the inner side of the guitar-top, so that screws may be passed through the said anchor-bar and top and screwed into said reinforcing-bar. This construction is illustrated in Fig. 4, in which 22 indicates the reinforcing-bar, and 23 the screws. As shown and preferred, the reinforcing-bar 22 is cut away or reduced at 24 to permit the pegs 11 to project therethrough.

With this construction it is not necessary to glue either the anchor-bar 4 or the reinforcing-bar 22 to the top of the instrument, although this may be done, if desired. By this construction the strain from the strings is, through the reinforcing-bar 22, distributed nearly or quite across the entire top of the instrument, and the anchor-bar itself is clamped onto the top and has its base of resistance in the reinforcing-bar 22 instead of on the upper surface of the top plate of the instrument. This of course makes it impossible to tear the anchor-bar loose from the top of the instrument.

As is well known, mandolins as hitherto constructed are provided with duplicate strings—that is, each open tone is produced by two strings of the same size tuned to the same pitch. In my improved instrument I arrange the strings in triplicates, or, in other words, provide three strings of equal pitch for each open tone. This I find increases the volume of the tone of the mandolin, and, furthermore, when these triplicate strings are placed as closely as possible together make the tremolo or shake much easier to perform. I still further improve the tone qualities of the instrument by stretching a plurality of strings through the interior of the instrument. I obtain by far the best results by stretching these strings longitudinally of the instrument and parallel or approximately parallel to the guitar-strings. 19 indicates these interior strings, which, as shown, extend directly under the sound-hole 2 about half-way between the top and bottom. At their forward ends they are passed through perforations in the body of the instrument and are anchored by means of knots or otherwise, and their rear ends extend through perforations in the rear portion of the rim of the body 1 and are secured to keys 20 on an outside anchor plate or bar 21. These interior strings 19 will vibrate in sympathy with the strings of the guitar or of the mandolin and will both increase the volume of sound produced and will modify

the quality of the tone by giving certain so-called “undertones.” A greater or less number of these strings may be provided, and the tension of the strings, and hence their pitch, may be varied by means of the keys 20, so as to give the best results.

The instrument above described embodies certain features of novelty—such, for example, as the sounding-post 18, located as described—which are important only in a combination instrument of the character described.

It will of course be understood that various alterations and modifications of the above features may be made without departing from the spirit of my invention.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. The combination with the body 1, with the sounding-hole 2, of the guitar neck and strings, the mandolin neck and strings, the mandolin-bridge 5, and the sounding-post 18 extending between the bottom and top of the instrument, approximately under the inner end of said bridge 5 and at the adjacent edge of said sounding-hole 2, as and for the purposes set forth.

2. The combination with the body 1, with sounding-holes 2 and 3, of the guitar neck and strings, the mandolin neck and strings, the mandolin-bridge 5, and the sounding-post 18 extending between the top and bottom of the instrument, approximately under the inner end of said bridge 5 and at the adjacent edge of said sounding-hole 2, for strengthening the top where it is weakened by said holes 2 and 3, and giving better tone, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN ENGLUND.

Witnesses:

BESSIE B. NELSON,
F. D. MERCHANT.