

Dec. 20, 1927.

1,653,555

A. EILERT

FRAME FOR SOUNDING BOARDS OF STRINGED MUSICAL INSTRUMENTS

Filed Oct. 12, 1925

2 Sheets-Sheet 1

fig.1

fig.2

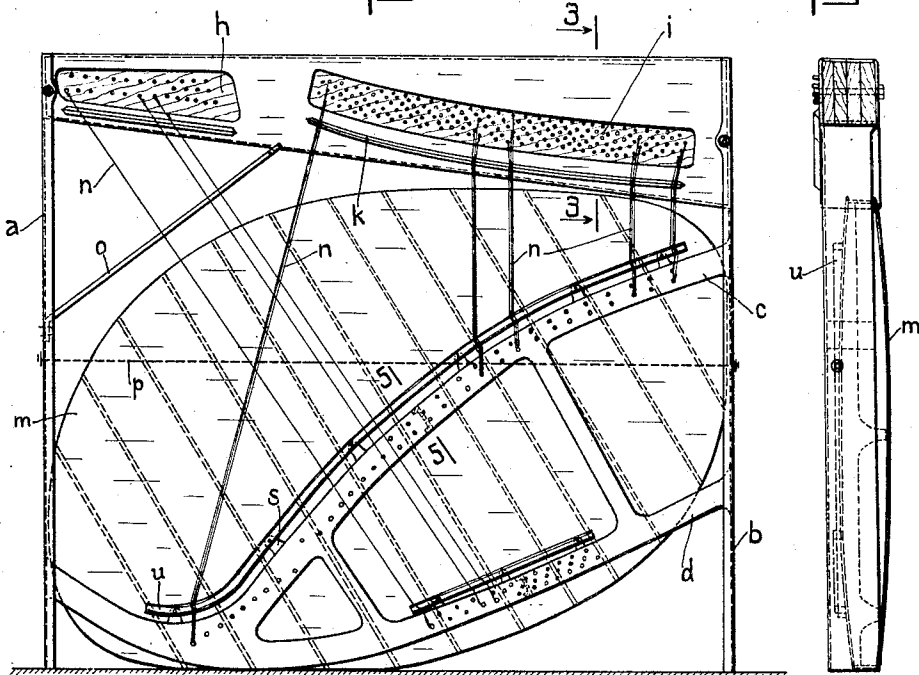
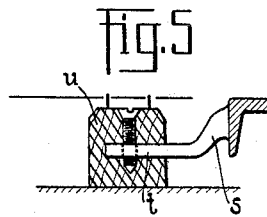
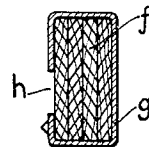


fig.6



fig.3



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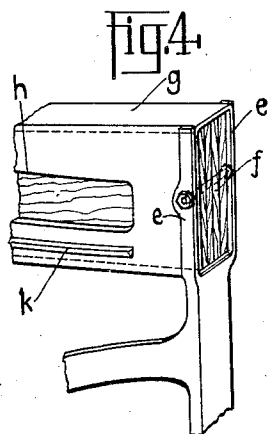
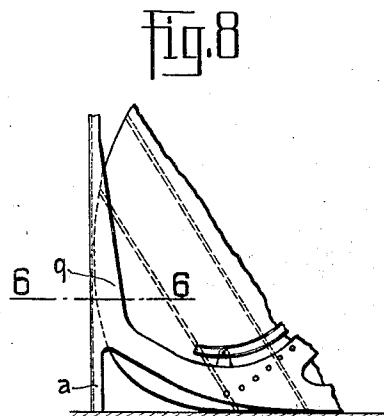
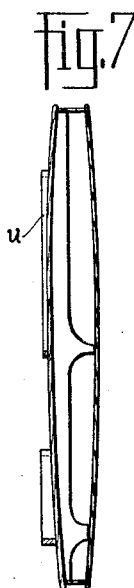
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FRAME FOR SOUNDING BOARDS OF STRINGED MUSICAL INSTRUMENTS

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

ADOLF EILERT, OF BRUNSWICK, GERMANY.

FRAME FOR SOUNDING BOARDS OF STRINGED MUSICAL INSTRUMENTS.

Application filed October 12, 1925, Serial No. 62,152, and in Germany April 25, 1925.

My invention relates to improvements in frames for sounding boards of stringed musical instruments, and the object of the improvements is to provide a frame which is light in construction and permits the free oscillations of the sounding board, and which takes up the tension of the strings in a favorable way. With this object in view my invention consists in the matters to be described hereinafter and particularly pointed out in the appended claims.

For the purpose of explaining the invention an example embodying the same has been shown in the accompanying drawing, in which the same reference characters have been used in all the views to indicate corresponding parts. In said drawing,

Fig. 1, is an elevation showing the frame and the sounding board carried thereby,

Fig. 2, is an end view looking from the left in Fig. 1,

Fig. 3, is a section taken on the line 3—3 of Fig. 1,

Fig. 4, is a detail perspective view showing one of the corners of the frame,

Fig. 5, is a detail sectional view taken on the line 5—5 of Fig. 1,

Fig. 6, is a detail sectional view taken on the line 6—6 of Fig. 8,

Fig. 7, is a sectional view showing the sounding board, and

Fig. 8, is a detail view showing a modification.

In the example shown in the drawing the frame carrying the sounding board consists of a pair of side members *a* and *b*, transverse members *c* and *d* secured to the members *a* and *b* and a tuning plank composed of a wooden body *f* and a jacket *g* enclosing the wooden body. The side members *a* and *b* are U-shaped in cross-section, and they are bifurcated at their top end as is shown at *e* in Fig. 4, the bifurcated portions *e*, *e* providing a seat for the tuning plank *f*, *g*. The strength of the members *c*, *d* is sufficient to take up the tension of the strings *n* attached thereto, without needing any bracing means intermediate the same and the top part of the frame, for which purpose they are made from strong material such as cast steel. By providing the tuning plank with the jacket *g* also the strength of the said tuning plank is sufficient to take up the tension of the strings without needing any

bracing means intermediate its end, the said tuning plank being ordinarily supported exclusively at its ends, though in some cases I provide a bracing member *o* between the tuning plank *f*, *g* and the side member *a*. In some cases the side members *a* and *b* are braced relatively to each other by means of a rod *p*.

In the modification shown in Figs. 6 and 8 the flanges of the members *a* and *b* are enlarged at the parts where the members *c* and *d* are joined thereto, and the said enlarged portions *q* are made integral with the said members.

In the example shown in the figures the sounding board is in the form of a box *m*, and the said box is fixed to brackets *s* made integral with the member *c* and engaging in slots *t* of the bridge *u* of the sounding board.

I claim:

1. A frame for stringed musical instruments, comprising a pair of side members, a tuning plank supported only by the ends of said side members, braces connecting said side members and unsupported except for the same, and means for attaching the strings respectively to said tuning plank and braces.

2. A frame for stringed musical instruments, comprising a pair of side members bifurcated at one of their ends, a tuning plank fixed to the bifurcated ends of said side members, braces connecting said side members and freely supported between the same, and means for attaching the strings respectively to said tuning plank and braces.

3. A frame for stringed musical instruments, comprising a pair of side members U-shaped in cross-section, one of the flanges of each side member being gradually enlarged, a tuning plank fixed to the ends of said side members, braces connecting said enlarged portions of the flanges of the side members and freely supported between the same, and means for attaching the strings respectively to said tuning plank and braces.

4. A frame for stringed musical instruments comprising a pair of metallic side members, a tuning plank supported only by the ends of said side members, a brace connected to said side members and unsupported except for the same, means for attaching the strings respectively to said tuning plank and brace, and a metallic jacket partially enclosing said tuning plank to compensate for

strains set up by the strings of said instrument.

5 5. A support for the sounding board of stringed musical instruments, comprising an open frame formed by two spaced side members, a tuning plank secured to and supported solely by the ends of said side mem-

bers, and a metallic brace secured to and supported solely by said side members, said plank and said brace serving as means for 10 attaching the strings of said instrument.

In testimony whereof, I affix my signature.

ADOLF EILERT.