No. 890,811. PATENTED JUNE 16, 1908.

A. STAHL.

BACK FOR UPRIGHT PIANOS.

APPLICATION FILED FEB. 17, 1908.

Fig. 1.

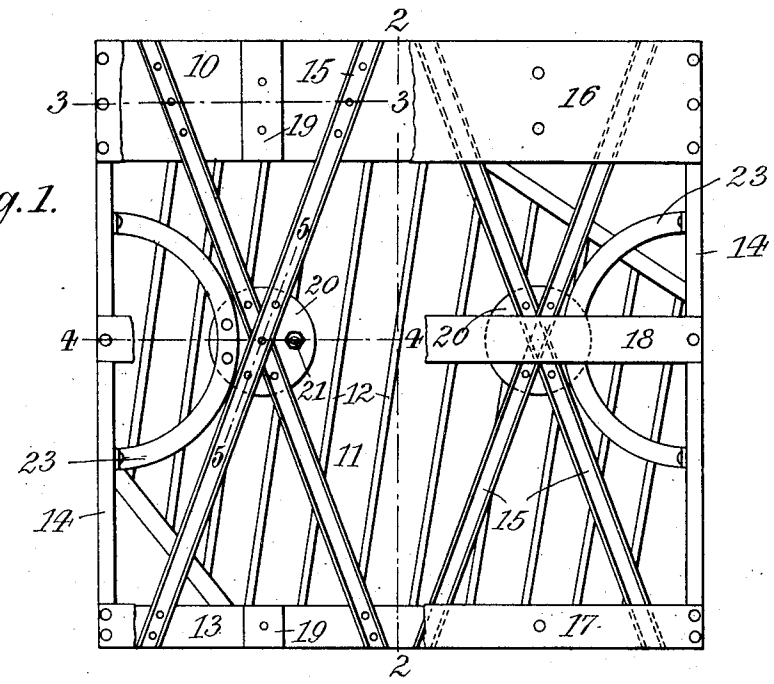


Fig. 2.

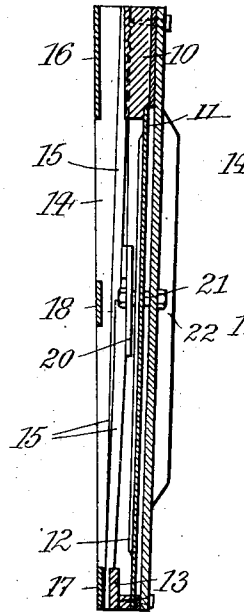


Fig. 3.

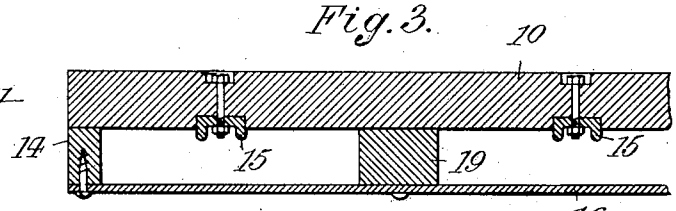


Fig. 4.

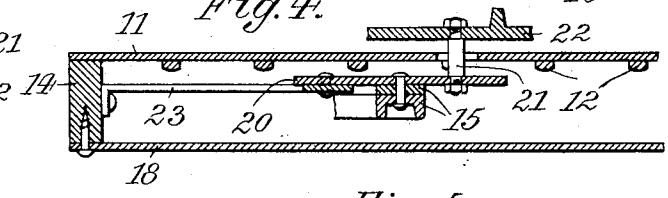
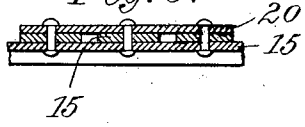


Fig. 5.



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BACK FOR UPRIGHT PIANOS.

No. 890,811. Specification of Letters Patent. Patented June 16, 1908.

Application filed February 17, 1908. Serial No. 416,166.

To all whom it may concern:

Be it known that I, AUGUST STAHL, a citizen of the United States, residing at New York city, Manhattan, county and State of New York, have invented new and useful Improvements in Backs for Upright Pianos, of which the following is a specification.

This invention relates to a back for upright pianos, which is constructed with a view of avoiding bulkiness, is of superior strength and lightness, and constitutes an effective anchorage for the wrest plank.

In the accompanying drawing: Figure 1 is a rear elevation, partly broken away, of my improved back for upright pianos; Fig. 2 a vertical section thereof on line 2—2, Fig. 1; Fig. 3 an enlarged horizontal section on line 3—3, Fig. 1; Fig. 4 a similar section on line 4—4, Fig. 1, and Fig. 5 a section on line 5—5, Fig. 1.

The wrest plank 10 extends rearwardly along the upper edge of the sounding board 11, which has the usual reinforcing ribs 12. Along the lower edge of the sounding board extends a bottom rail 13, and along its upright edges extend side rails 14. Countersunk into wrest plank 10 and bottom rail 13, and bolted thereto, are a number of oblique metal braces 15, which are arranged in a plane parallel to that of the sounding board. These braces are arranged in pairs, the members of which intersect each other at the center at acute angles. As the braces are countersunk into the wrest plank and extend in an oblique direction across the same, they constitute means for effectively sustaining it against vertical strain. In this way the strength and rigidity of the structure is increased.

As shown, braces 15 are made of channel iron, but it is evident that their shape may be varied. The upper ends of the braces are covered by a strip 16 secured to side rails 14 directly above wrest plank 10. In like manner, the lower ends of the braces are covered by a strip 17 secured to rails 14 above bottom rail 13. A third central strip 18 connects rails 14 intermediate strips 16 and 17. Between wrest plank 10 and strip 16, as well as between bottom rail 13 and strip 17, are interposed a suitable number of spacing blocks 19.

As already stated, braces 15 are arranged in pairs, each composed of intersecting members. Two of such pairs are shown, but such number may obviously be varied. At their point of intersection, one member is sunk into the other member, and here there is secured to the braces a plate 20 that occupies the four sector-shaped openings around the crossing of the braces. Through plates 20 extend bolts 21 that connect such plates to the iron frame 22, usually known as the piano plate or frame. As plates 20 present considerable surface, bolts 21 may be readily positioned to pass any obstruction on the face of the iron plate or frame, or on the sounding board. In addition to the oblique braces 15, there are provided a pair of metal end braces 23 that flank braces 15, and are connected to plates 20 and also to side rails 14. These end braces are shown to be made of curved form, but they may be made angular, straight, or of other shape, if desired.

It will be seen that my improved piano back is light, strong and compact, and that it constitutes an effective anchorage for the wrest plank.

I claim:

1. An upright piano having a sounding board, a wrest plank, and an oblique metal brace sunk into the wrest plank and extending across the sounding board, substantially as specified.

2. An upright piano having a sounding board, a wrest plank extending along the top thereof, a rail extending along the bottom thereof, and an oblique metal brace sunk into said wrest plank and rail, substantially as specified.

3. An upright piano having a sounding board, a wrest plank, an iron piano-frame, an oblique metal brace sunk into the wrest plank, and a plate secured to the brace and bolted to the iron piano-frame, substantially as specified.

4. An upright piano having a sounding board, a wrest plank, a pair of intersecting oblique metal braces sunk into the wrest plank, a plate connected to the braces at their point of intersection, an iron piano-frame, and bolts connecting said plate to said frame, substantially as specified.

5. An upright piano having a sounding board, a wrest plank, a pair of intersecting oblique metal braces sunk into the wrest plank, a pair of end braces flanking the oblique braces, and means for attaching said end braces to said oblique braces, substantially as specified.

Signed by me at New York city, (Manhattan,) N. Y., this 14th day of February, 1908.

AUGUST STAHL.

Witnesses:
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WILLIAM A. SHIELDS.