(No Model.)

H. McCLELLAN.

BRACE FOR PIANO KEY BOTTOMS.

No. 477,566. Patented June 21, 1892.

Fig 1.

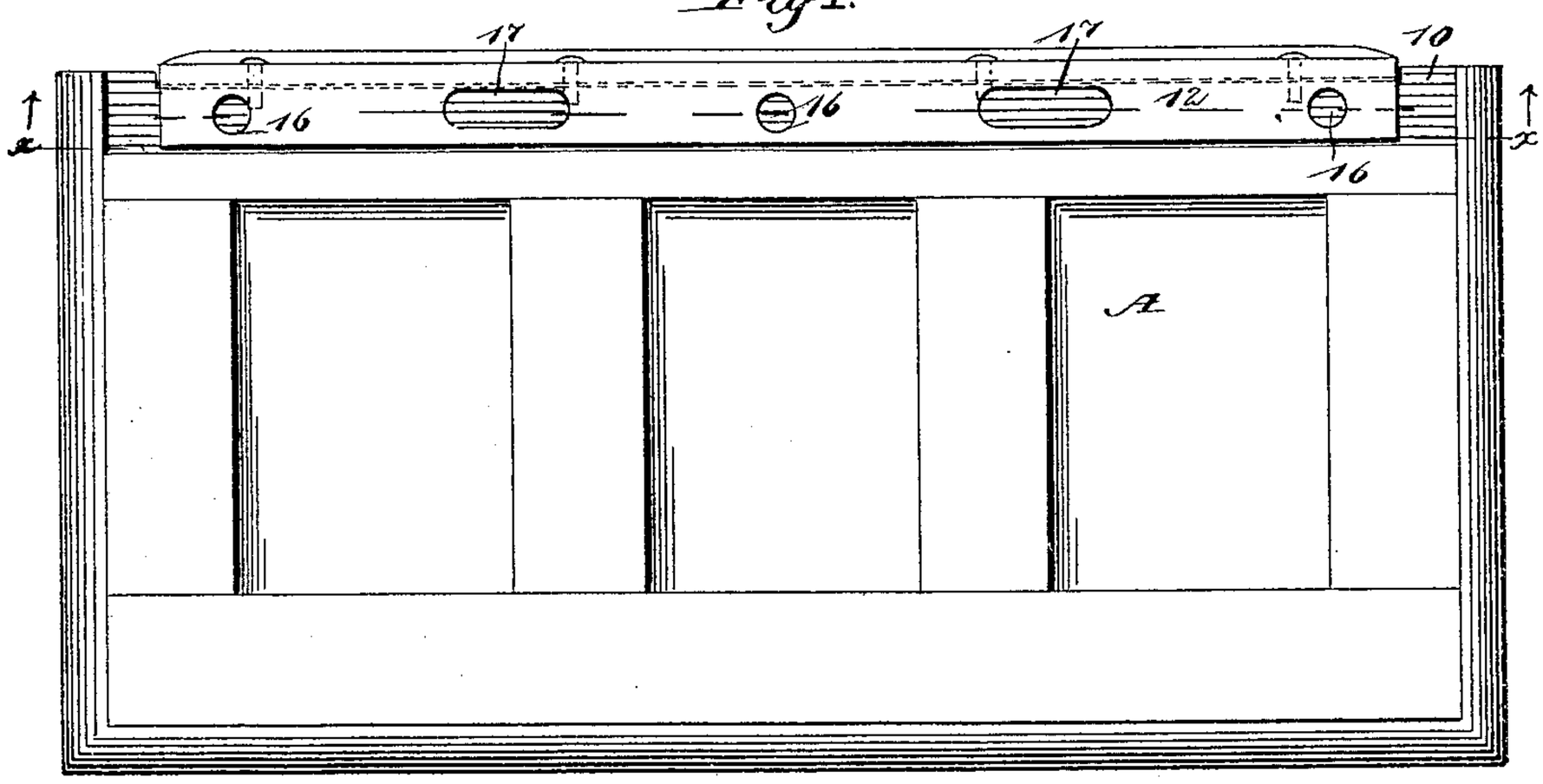


Fig 2

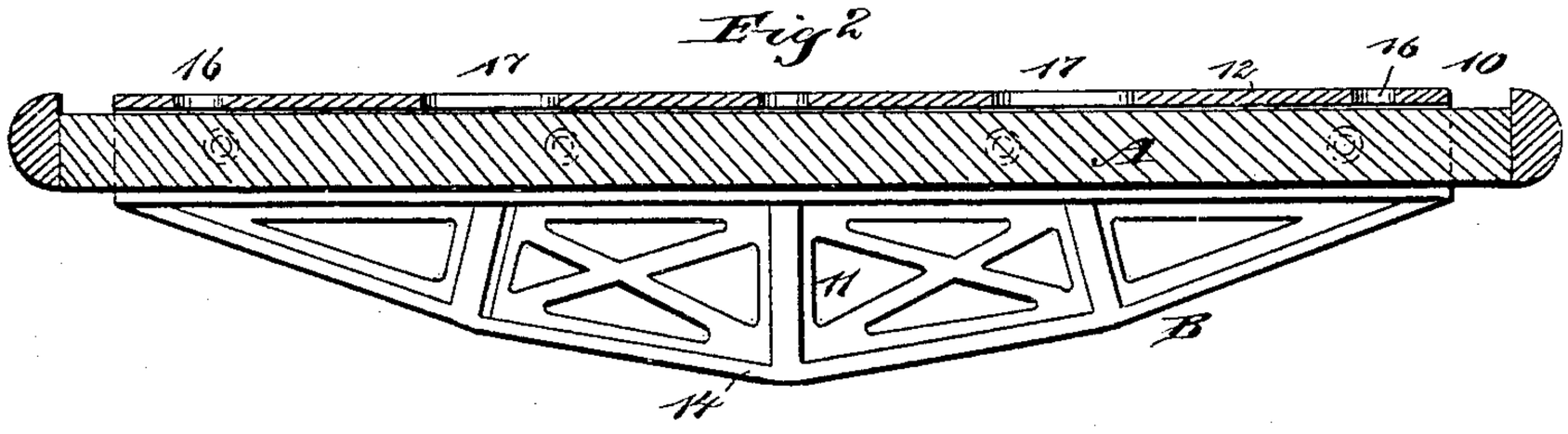
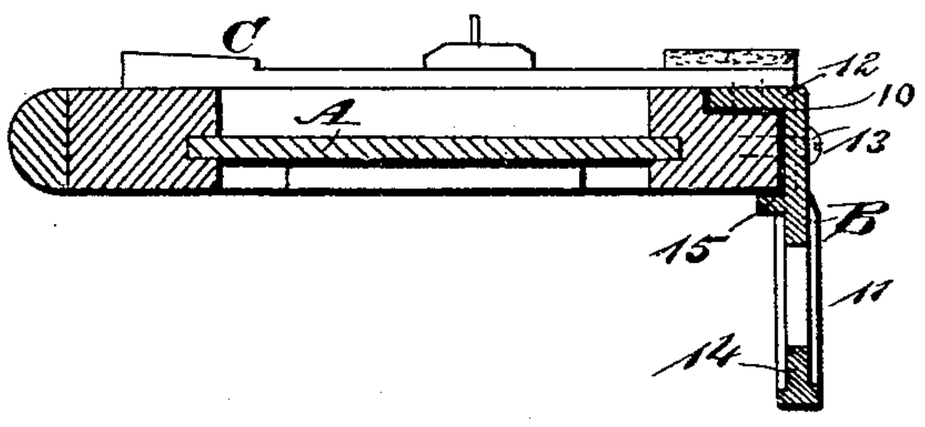


Fig. 3.



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HERMAN MCCLELLAN, OF TORONTO, CANADA.

BRACE FOR PIANO-KEY BOTTOMS.

SPECIFICATION forming part of Letters Patent No. 477,566, dated June 21, 1892.

Application filed March 30, 1892. Serial No. 427,097. (No model.)

To all whom it may concern:

Be it known that I, HERMAN MCCLELLAN, of Toronto, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Brace for Piano-Key Bottoms, of which the following is a full, clear, and exact description.

My invention relates to a brace for piano-key bottoms, and has for its object to provide a means whereby the key-bottom of an upright piano may be constructed of wood and the bottom preserved in perfect form, being effectually prevented from warping.

Another object of the invention is to provide a brace light in weight, strong, and capable of being expeditiously and conveniently applied, and a brace which will not in the least interfere with the keyboard or the action of the piano.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a portion of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of a key-bottom having the brace applied thereto. Fig. 2 is a section taken longitudinally through the brace and the key-bottom, the section being taken, practically, on the line *x x* of Fig. 1; and Fig. 3 is a transverse section through the key-bottom and the brace, illustrating the key-frame in position upon the bottom.

The key-bottom A is constructed from wood and may be of the usual or of any desired shape. In the upper face of the key-bottom at its rear edge a longitudinal recess 10 is produced for the reception of the brace B. The brace is made of metal and consists of a vertical member 11 and a horizontal member 12. The upper portion of the vertical member is solid, as illustrated at 13 in Fig. 3, and the solid portion is of a depth slightly greater than the thickness of the rear face of the key-bottom, as is best shown in Fig. 3. The lower portion of the vertical member is constructed of lattice-work, the lower edge 14 being, however, solid, and the shape of the lower portion of this member of the brace is that of an inverted truss or inverted arch, as by imparting this shape to the vertical member lightness may be combined with strength. The upper or horizontal member 12 of the brace is of a width corresponding, practically, to the width of the recess 10 in the key-bottom, which recess this member is adapted to enter. Upon the front or inner face of the vertical member of the brace a rib 15 is produced longitudinally thereof, and the rib is placed such a distance from the horizontal member that when said horizontal member is in engagement with the top of the key-bottom the rib is in positive engagement with its bottom face.

The brace is secured to the key-bottom by means of screws or equivalent fastening devices, which are preferably passed through the back of the brace into the rear edge of the key-bottom, and apertures 16 are made at proper intervals in the upper horizontal member of the brace to receive the screws or other fastening devices employed to hold the key-frame C upon the key-bottom, and recesses 17 are also made in the upper or horizontal member of the brace to permit of the action-bracket bolts being screwed into key-bottom.

It will be observed that a brace such as has been described will strengthen wooden piano-key bottoms in such a manner as to effectually prevent them from warping and destroying the touch of the piano, which has always been a grievous trouble to piano-manufacturers, and that the brace may be expeditiously and conveniently applied, and, further, that the brace does not in the least interfere with any of the operative portions of the instrument.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improved article of manufacture, a brace for piano-key bottoms, the same consisting of a vertical member shaped at its lower end as an inverted truss and provided upon its inner face with a longitudinal rib, and a horizontal member integral with the upper edge of the vertical member and extending over the rib, the rib being adapted for engagement with the under face of the key-bottom and the horizontal member for

engagement with the upper face of the same, as specified.

2. The combination, with a piano-key bottom constructed of wood and provided with a recess in its upper face at the back, of a metal brace comprising a horizontal member entering the recess in the key-bottom, and a vertical member extending downward in engagement with the rear edge of the key-bottom, the lower portion of the said member being of lattice-work and shaped as an inverted truss, the vertical member of the brace being also provided with a rib upon its inner face adapted for engagement with the under face of the key-bottom, substantially as and for the purpose specified.

HERMAN McCLELLAN.

Witnesses:
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