No. 637,160. Patented Nov. 14, 1899.

A. RICHTER.

UPRIGHT PIANO FRONT.

(Application filed Sept. 13, 1898. Renewed Oct. 11, 1899.)

(No Model.)

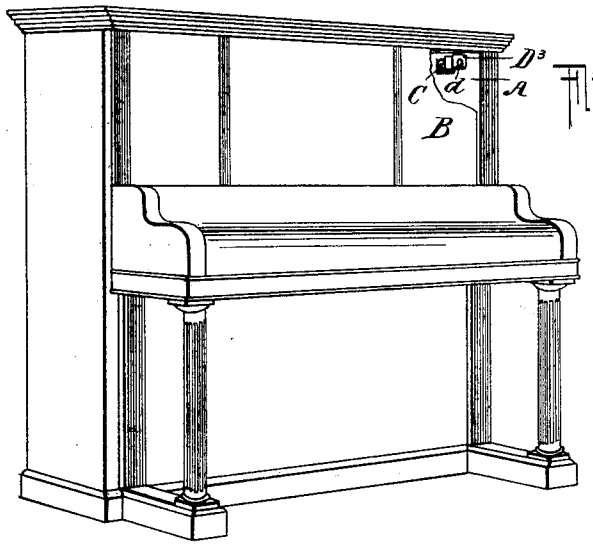


Fig. 1.

Fig. 2.

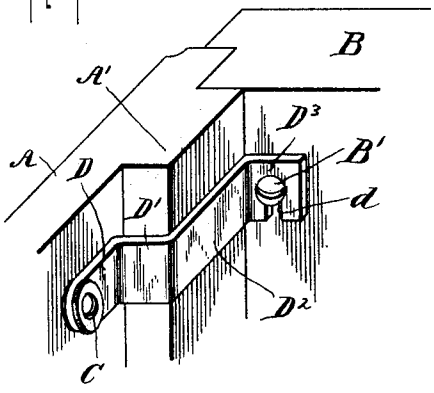


Fig. 3.

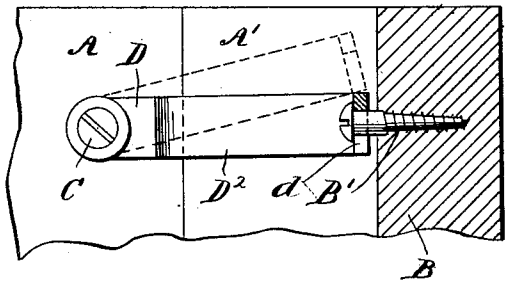


Fig. 4.

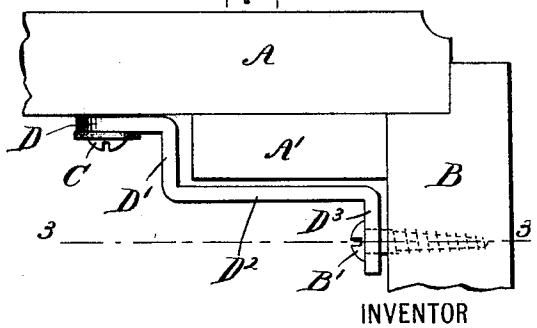
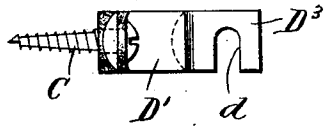


Fig. 5.



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UPRIGHT-PIANO FRONT.

SPECIFICATION forming part of Letters Patent No. 637,160, dated November 14, 1899.

Application filed September 13, 1898. Renewed October 11, 1899. Serial No. 733,328. (No model.)

To all whom it may concern:

Be it known that I, AUGUST RICHTER, a citizen of the United States, residing in New York, in the borough of Manhattan, in the State of New York, have invented a certain new and useful Improvement in Upright-Piano Fronts, of which the following is a specification.

My improvement relates to provisions for securing and releasing the front frames which occupy the whole of the breadth of the front of the upper portion of the case. I employ, as usual, dowels in the cross-piece below and provide corresponding holes in the bottom of the frame to match on these dowels, so that the lower edge may be engaged and released by the ordinary movements—thrusting down and drawing up—in the required vertical position. The improvement relates to the means for holding the upper edge of the frame. I provide peculiar bifurcated hooks pivoted in the interior of the main casing, one on each side and arranged each to engage with the head of a screw set in the right position longitudinally of the hook in the inner face of the frame, near the upper edge. These hooks not only prevent the frame from falling forward, but also effectually oppose any displacement of the same in the upward direction. The hooks are formed to allow for the upright strips often employed along the interior of the front edge of the casing. The tightness with which they engage with the screws in the frame may by virtue of the longitudinal direction of the screw be adjusted from time to time by the application of a screw-driver, slackening the screws and relaxing the engagement, or, as is more frequently required, from time to time turning the screws a little farther into the frame to make the engagement of the hooks more firm.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is an outline perspective view of an upright piano with a portion broken away to show one of my fastenings. The succeeding figures are on a larger scale. Fig. 2 is a perspective view of a portion seen from the interior. Fig. 3 is a vertical section of a portion on the line 3 3 in Fig. 4. Fig. 4 is a plan view corresponding to Fig. 3. Fig. 5 is an end view of the hook alone, showing a slight modification.

Similar letters of reference indicate corresponding parts in all the figures where they appear.

A is the stationary casing of the piano, and A′ an ordinary strip glued in position in the interior at the front edge (each side) to give increased thickness and stiffness, and B is the front frame, rabbeted to match against and partly within the front of the case A.

A screw C, with leather washers, forms a frictional pivot for my hook D, which latter is formed from flat steel bent in angular position, as shown, certain portions being further distinguished by supernumerals, and having an open slot *d* in the front bend, which when the front is to be secured in position is caused to engage with the screw B′, adjustably set in the front B, extending in the direction of the length of the hook. This frame is engaged at the bottom in the ordinary manner by dowels. (Not shown.) It is held at the top by one of my hooks D engaging with one of the adjustable screws B′ at each side.

My fastening is cheap and substantial. It allows of adjustment with great nicety by the simple operation of setting in and out one or both of the screws B′. It performs the double function of holding the front frame with adjustable tightness to the piano-case, pivoting directly on the main case and also resisting any accidental movement of the frame upward. Any such movement of the frame which is liable to be inaugurated in transportation, particularly when the piano is laid on its back, is resisted at a very early stage by the increased tightening of my fastenings—that is to say, the change of the angle of the hooks when the front frame changes its position causes the hooks to bind tighter and to effectually resist any such movement.

The hooks are made rights and lefts. Each has a portion adjacent to the pivot-screw C, a bend D′ at right angles to that plane, another bend D^2 into a plane parallel to the pivot portion, and a final bend D^3, again at right angles to the starting-plane. An open slot *d* is formed in part of the portion D^3. I propose to manufacture the hooks in a large way of steel, nicely surfaced, and provide them

as articles of trade with other piano hardware. Ordinary screws may serve for the pivot C. Ordinary screws may also serve for the engaging means B'. It is preferable that the under faces of the heads of these screws be flat to afford a good bearing for the hooks on being forced down into engagement and lifted up again to liberate the frame.

The bends D' and D^2 of the hooks are important in allowing for the strips A' when such are employed. In the cases where these strips are omitted these bends of the hooks involve no serious disadvantage. Their presence allows the hooks to pivot each on the interior of the case at a suitable distance from the front frame and allow the stiffening-strip A' to be used or omitted, as preferred. The thickness and depth of the metal in each hook may be varied. The metal may be swelled, what is sometimes termed "half-round," instead of flat. Fig. 5 shows such formof the metal. I prefer about the proportions shown.

I claim as my invention—

As an improvement in upright-piano fronts, the combination with the case and the removable front frame, and the ordinary dowels at the bottom, of two bifurcated hooks pivoted directly in the case one at each side, each bent at a right angle at three points D', D^2 and D^3, the front part D^3 having a slot *d* open below, which forms the bifurcation, and of two screws B' extending longitudinally relatively to the hooks and adjustable in such frame, and arranged to be engaged by such bifurcations in the hooks and to serve therewith, substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

AUGUST RICHTER.

Witnesses:
J. B. CLAUTICE,
M. F. BOYLE.