

No. 711,540.

Patented Oct. 21, 1902.

J. A. SMITH.

FASTENING FOR MECHANICAL PIANO PLAYERS.

(Application filed June 8, 1901.)

(No Model.)

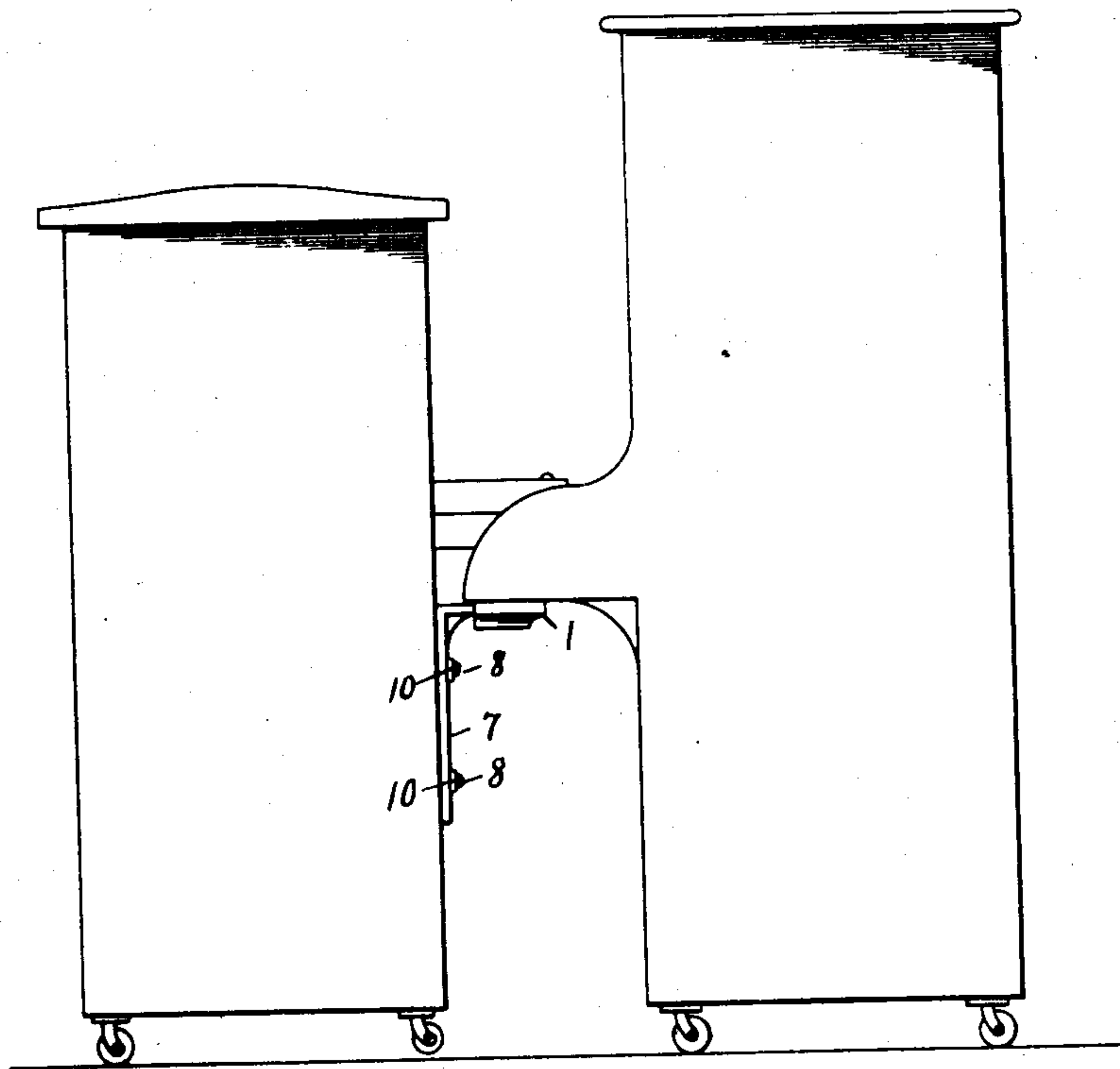


Fig. 1.

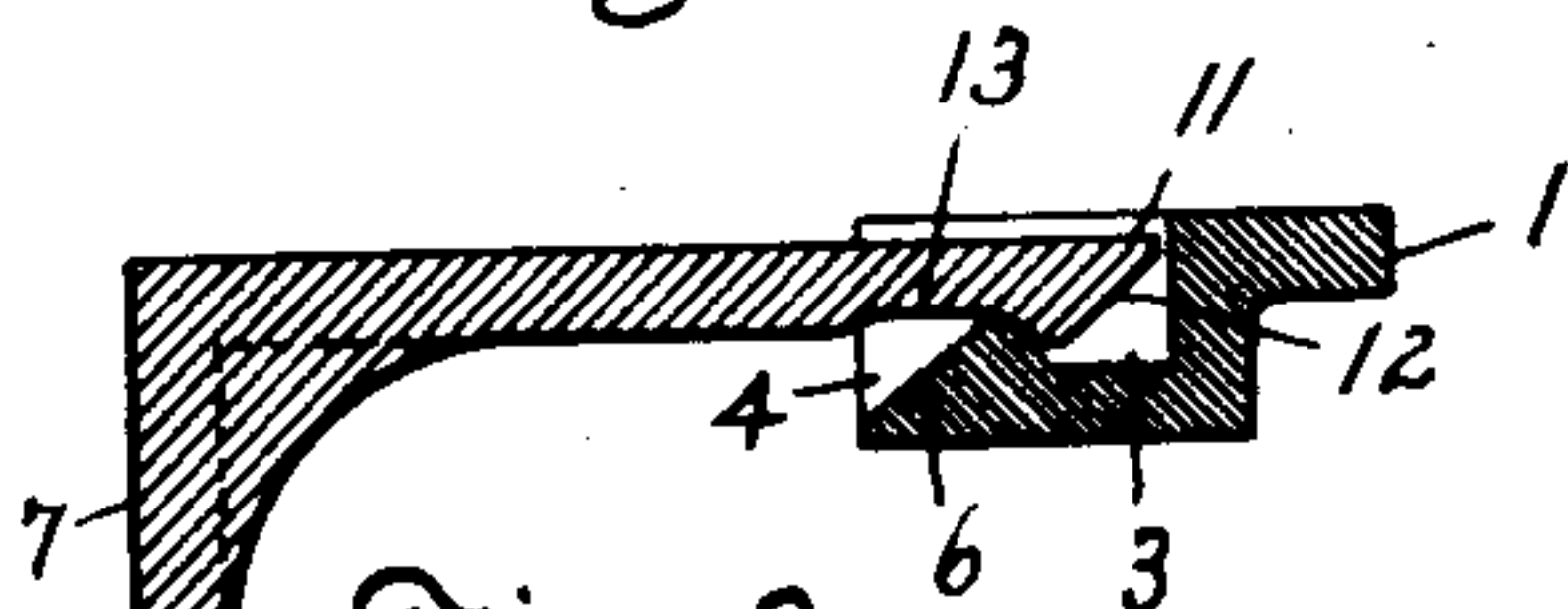


Fig. 2.

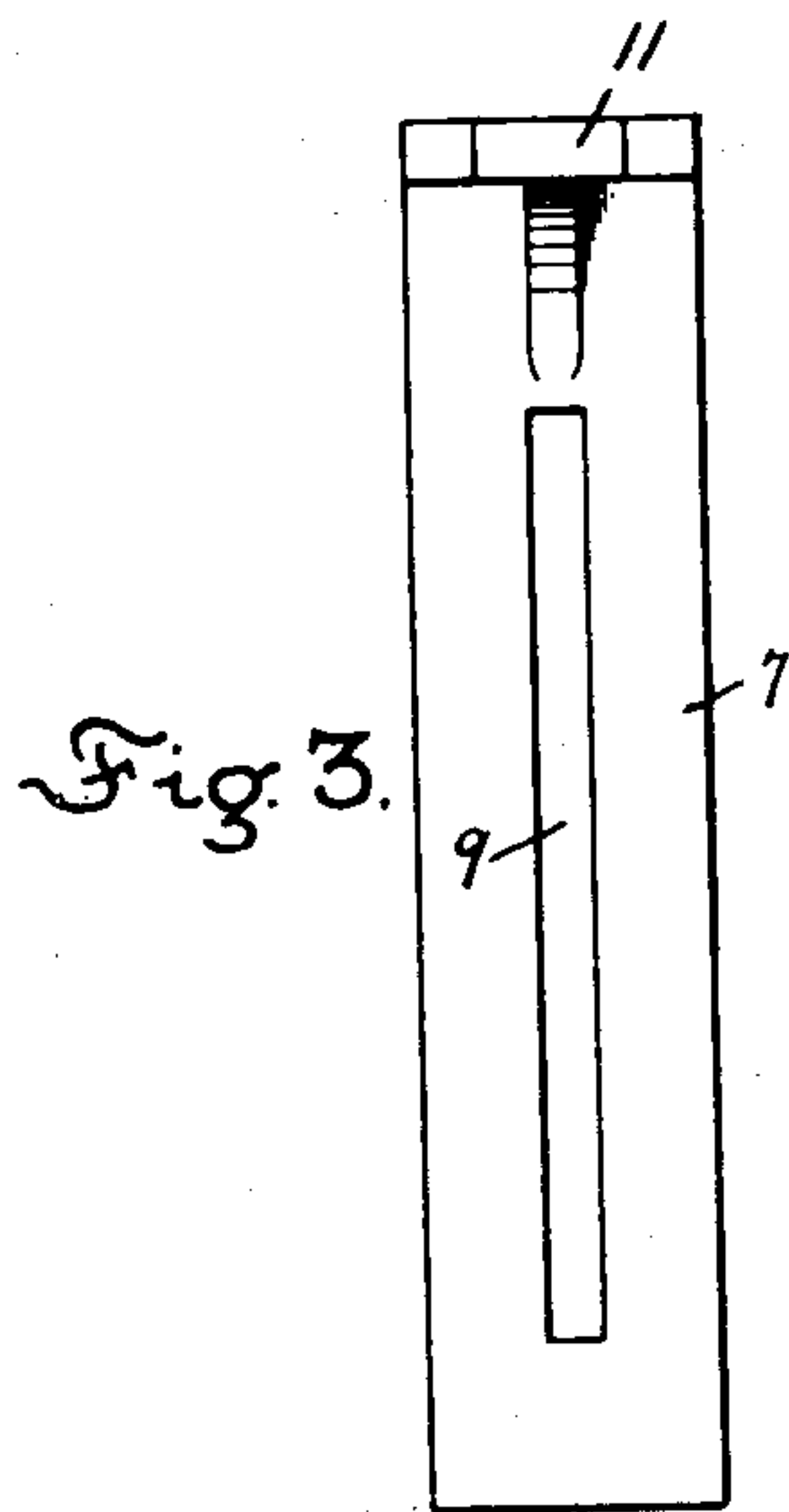


Fig. 3.

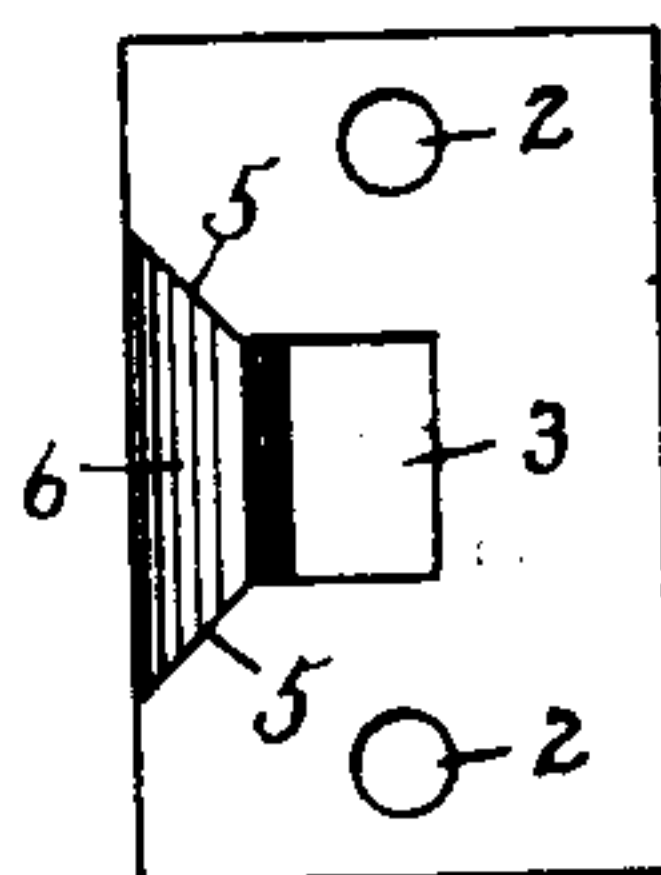


Fig. 4.

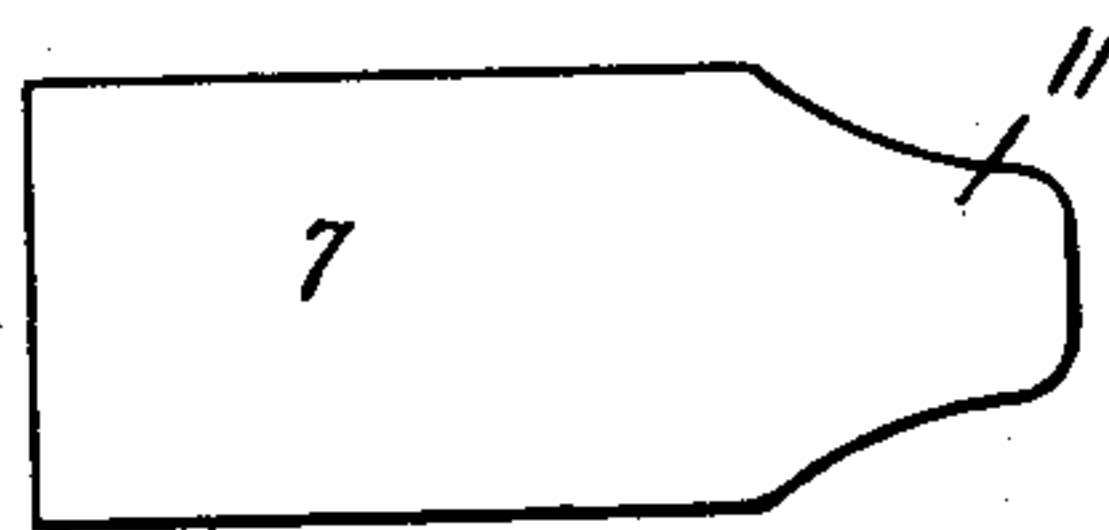


Fig. 5.

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UNITED STATES PATENT OFFICE.

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FASTENING FOR MECHANICAL PIANO-PLAYERS.

SPECIFICATION forming part of Letters Patent No. 711,540, dated October 21, 1902.

Application filed June 8, 1901. Serial No. 63,674. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. SMITH, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Fastenings for Mechanical Piano-Players, of which the following is a specification.

This invention relates to improvements in fastenings for mechanical piano-players.

10 The object of the invention is provide a device for fastening mechanical piano-players to pianos in such a manner as to prevent lateral movement of the player and to insure the proper relative position of the key-levers
15 of the player with the keys of the piano to be played.

A further object of my invention is to provide means for guiding the player into position with relation to the piano in order that
20 the key-levers of the player may be brought into proper position over the keys of the piano.

The invention consists of the new and novel features hereinafter more fully described, and pointed out in the claims.

25 In the accompanying drawings, Figure 1 is a side elevation of a mechanical player fastened to a piano with my improved fastener. Fig. 2 is a vertical central section of my fastener. Fig. 3 is a front elevation of the angle-iron forming part of the fastener. Fig.
30 4 is a plan view of the locking-plate, and Fig. 5 is a plan view of the angle-iron.

Similar numerals refer to like parts throughout the several views.

35 Referring to the accompanying drawings, forming part of this specification, 1 designates the fastening-plate, which is secured to the under side of the keyboard of the piano, as shown in Fig. 1, by screws or other suitable
40 means passing through the holes 2. This plate 1 is provided with a recess 3 and an opening 4 in the front thereof leading to said recess. The said walls 5 of said opening converge inwardly to said recess. The bottom 6
45 of the said opening inclines upwardly toward the recess 3. The piano is provided with two of these plates 1, secured to the under side of the keyboard in a position to receive the angle-irons 7, which are secured to the ends of
50 the piano-player.

The angle-irons 7 are secured to the ends

of the piano-player at the rear thereof, as shown in Fig. 1, and are held thereto by the screws 8, passing through the elongated slot 9. The said screws 8 are provided with
55 washers 10 to prevent the heads of the screws from passing through the said slot. By providing the irons 7 with the elongated slot 9 it will be seen that the said irons may be vertically adjusted to any desired position on the
60 ends of the player. The laterally-projecting arm of the angle-irons 7 is provided with tapering head 11, the end of which is beveled on the under surface at 12, and a neck 13.

After the plates 1 and the angle-irons 7
65 have been secured to their proper position on the piano and player, respectively, the latter is then ready to be secured to and removed from the former when desired.

When it is desired to fasten the player to
70 the piano, the former is pushed up toward the latter, and as the angle-irons 7 enter the opening 4 of the plate 1 the tapering head 11 of the said irons, coming into contact with the converging side walls 5 of the said open-
75 ing, will guide the head of the angle-iron into the recess 3. At the same time the beveled surface 12 will ride up the inclined surface 6 of the plate 1 until the head 11 falls into the
80 recess 3, when the player will be securely fastened to the piano in such a manner as to prevent any lateral or forward movement of the player and to insure the proper position of the key-levers of the play with relation to the keys of the piano to be played.
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It will be seen from Fig. 1 that when the player is secured to the piano the rear end of the player is held slightly from the floor and the weight thereof held by the fastener, whereby any vibrating or oscillating motion
90 of the player caused by working the treadles will not affect the relative position of the key-levers of the player and the keys of the piano, which greatly adds to the efficiency and effect of the player.
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Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with the piano and the piano-player, of a fastening device consisting
100 of an angle-iron having one arm secured to and the other arm projecting from the piano-

player, having a tapering head and a metal plate secured to the piano, having a recess in its upper surface for the reception of the tapering head of the projecting arm of the angle-iron, and adapted to hold the rear of the piano-player slightly from the floor when the parts are brought together, as and for the purpose described.

2. The combination with the piano-player and the piano, of a fastening device comprising an angle-iron having one arm secured to and the other arm projecting from the piano-player, having a tapering head and a metal plate secured to the piano, having a recess in its upper surface for the reception of the tapering head of the projecting arm of the angle-iron, and adapted to sustain the weight of the rear of the piano-player, whereby any vibrating, or oscillating, motion of the piano-player caused by working the treadles, will not affect the relative position of the key-levers of the player and the keys of the piano.

3. The combination with the piano and the piano-player, of a fastening device comprising an angle-iron secured to the piano-player and having a tapering head projecting therefrom, and a metal plate secured to the piano, having a recess in its upper surface for the

reception of the tapering head of the projecting arm of the angle-iron, and adapted to hold the rear of the piano-player slightly from the floor when the parts are fastened together, as and for the purpose described.

4. The combination with the piano and the piano-player, of a fastening device comprising an angle-iron having one arm thereof secured to the piano-player and provided with an elongated slot, and the other arm projecting from the piano-player and provided with a tapering head, and a metal plate having a recess in its upper surface and an opening leading to said recess for the reception of the tapering head of the projecting arm, and adapted to sustain part of the weight of the piano-player when the parts are fastened together, whereby any vibrating, or oscillating, motion of the piano-player, caused by working the treadles, will not affect the relative position of the key-levers of the player and the keys of the piano.

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

JOHN A. SMITH.

Witnesses:

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