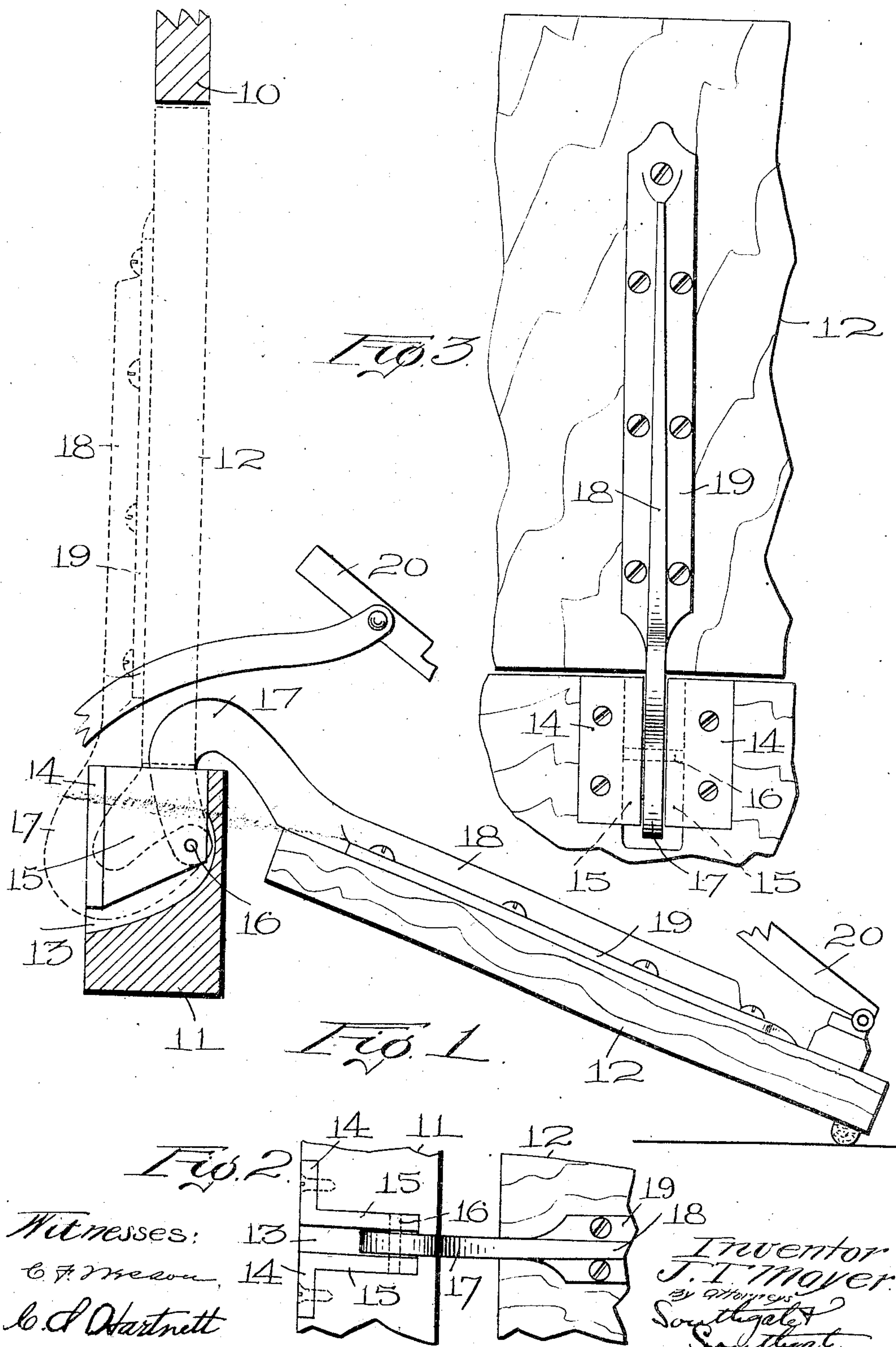


J. T. MAYER.
TREADLE DOOR.
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992,790.

Patented May 23, 1911.



Witnesses:
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UNITED STATES PATENT OFFICE.

JULIAN T. MAYER, OF NEW YORK, N. Y., ASSIGNOR TO J. & C. FISCHER, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

TREADLE-DOOR.

992,790.

Specification of Letters Patent.

Patented May 23, 1911.

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To all whom it may concern:

Be it known that I, JULIAN T. MAYER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Treadle-Door, of which the following is a specification.

This invention relates to a treadle door for piano cases.

10 The principal objects of the invention are to provide a construction of swinging treadle door which although pivoted at the bottom, will not require the cutting out or other mutilation of the front of the bottom rail of the casing and at the same time will be so arranged that its connections take up practically no room inside the casing either when open or closed, so that when the door is in closed position the casing will not show in any way that a treadle for pneumatic operation is in the casing; and to provide a construction securing these results which shall be simple in construction and operation and have no parts movable relatively to the treadle door.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing in which,

30 Figure 1 is a transverse sectional view of a portion of a combination piano casing, showing a preferred form of this invention applied thereto. Fig. 2 is a plan of a portion of the same showing the door open, and Fig. 35 3 is a rear elevation of the same showing the door closed.

The invention is shown as applied to a combination piano casing 10 having a bottom rail 11 to which the treadle door 12 is pivoted. The rail is cut out at the rear to provide an opening 13. At the edges of this opening are secured two L-shaped plates 14, the flanges 15 of which project into the opening parallel with each other and have a space between them. These plates project nearly to the front of the rail 11 and this rail is intact at the front, no opening being required. At the front of the flanges of these plates is a pivot pin 16 extending longitudinally with respect to the rail. On this pivot pin is pivoted an arm 17 adapted to swing from an upwardly to a rearwardly extending position, in both of which it is contained substantially within the opening 13 in the rail. This arm has an extension

18, which extends along the top or back of the treadle door 12 and has flanges 19 through which it is secured thereto. This arm with its extension constitutes an upwardly extending goose-neck. The extension projects up over the top of the rail and is shaped so that as it swings on its pivot its lower surface will entirely pass over the top of the rail. Outside the casing this arm extends downwardly and the top of the door 12, when it is open, is nearly on the level of the pin 16. The goose-neck is substantially U-shaped. When the door is swung back into the casing this goose-neck swings back and is almost entirely located in the slot between the plates 14 so that the parts occupy no room in the casing. The arm itself extends upwardly, being secured to the door. When the door reaches its closed position it will be seen that the entire weight of the door, as well as of the arm and goose-neck, is located substantially at the rear of the pivot pin 16; therefore, the entire force of gravity acts to assist in holding the door closed and if the latch with which the door is usually provided should become open or deranged, the door will not tend to open by gravity.

It will be understood of course that the treadles 20 are pivoted on the door in the usual way and when the door is swung to closed position they are folded within the casing.

While I have illustrated and described a preferred embodiment of the invention, I am aware that many modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction shown and described but

What I do claim is:—

1. In a musical instrument, the combination of a casing having a bottom rail provided with a recess therein extending from the back to a point near the front thereof and open at the top, a treadle door, an arm projecting from said treadle door up over the top of the rail when the door is open and down into said recess, and means for pivoting the downwardly extending portion of the arm in said recess.

2. In a musical instrument, the combination of a casing having a bottom rail pro-

vided with a recess extending downwardly from the top and inwardly from the back, an arm pivoted in said recess and adapted to extend up in the recess and over the top and front of the rail and downwardly outside the same, and a treadle door fixed to said arm and adapted to swing from open to closed position, said recess being adapted to receive said arm when the door is swung to closed position.

3. In a musical instrument, the combination of a bottom rail having a vertical recess opening inwardly from the back and downwardly from the front, a pair of flanged plates secured to the rail and extending inwardly from the back parallel with each other with a space between them, a pivot pin near the lower front edge of said plates, an arm pivoted on said pin and having a U-shaped form whereby said arm can swing about the pivot without interfering with the

top of the front of the rail, and a treadle door fixed to said arm.

4. In a musical instrument, the combination of a vertical bottom rail, an arm pivoted back of the front surface of the rail and lower than its top, and capable of swinging on the pivot from an upwardly extending to a rearwardly and downwardly extending position, said arm having an extension at an angle thereto projecting over the top of the rail and out of contact therewith when said arm is in its upwardly extending position, and a door secured to said extension, and provided with a treadle connected therewith.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

JULIAN T. MAYER.

Witnesses:

BELINDA HELEN POTTER,
THOMAS MCCONKEY.