

UNITED STATES PATENT OFFICE.

CLARENCE E. PRYOR, OF BINGHAMTON, NEW YORK.

FALL-BOARD MECHANISM FOR PIANOS.

No. 898,781.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLARENCE E. PRYOR, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Fall-Board Mechanisms for Pianos, of which the following is a specification.

My invention relates to improvements in fall board mechanisms for pianos in which horizontal and upright boards operate in conjunction with a series of arms and sliding blocks to control the action of the fall board as the piano is opened.

The objects of my improvement are 1. To economize space in the interior of the piano. 2. To avoid the fall and jar that often occurs in the operation of a fall board operated in the ordinary method. 3. To permit the piano to be opened for a period of time and at the same time to prevent the accumulation of dust on the interior parts of the piano while it thus remains open. I attain these objects by the mechanism illustrated in the accompanying drawing in which

Figure 1 is a cross section of the front portion of a piano taken on the line 1—1 of Fig. 2. Fig. 2 is a sectional plan taken on the line 2—2 of Fig. 1.

Similar letters refer to similar parts throughout the several views.

In my invention, A is the front fall board of a piano; B is the back fall board of a piano, and C the upright of the back fall.

S is the name board of a piano.

The front fall board A has a hinged connection with the back fall B at the hinge H as shown in Fig. 1 and Fig. 2. And when opened the front fall tips back to the position shown by I. The back fall has a hinged connection with the name board of the piano at J, and to this back fall B is firmly attached an arm K by screw connections 1 and 2. A similar arm is attached to the opposite end also of the back fall B. The arm K is connected with the link L by pivotal connections at M. The link L is pivoted at N with the sliding block D. The sliding block D is firmly attached to the upright back fall C. The sliding block D operates between the two projecting shoulders E and O as shown in Figs. 1 and 2. The shoulders E and O are firmly attached to the side of the frame R of the piano, and furnish a supporting track for the movement of the sliding block D. When the

piano is opened the front fall board A is tipped back into a position shown at I. The back fall B operating on its hinge J is tipped back until it is in an upright position. It then takes the place of the upright back fall C as shown by B', and A is then in the position shown at I'. As the back fall is lifted up, it moves the arm K which connecting with the link L pushes back the slide D which as before stated, is firmly attached to the upright back fall C, and hence moves C backward and downward until it assumes the position as shown at Q, and the back fall B has taken its place as shown at B'. In this position, the arm K has then assumed the position shown by K' and the link L has assumed the position shown by L'. A similar slide D and a similar arm K and link L have connections with the opposite end of the upright back fall C, and in this manner and by this operation the fall board is lifted from over the key board and the piano is opened.

Having thus described my invention, what I claim as new and for which I desire Letters Patent, are as follows:—

1. In a piano, the piano body having a fall board comprising two sections, one in front of the other, the first section hinged to the second section, the second section hinged to the piano body, projecting metallic arms firmly attached to the second section of the fall board; links within the piano body having pivotal connection with the arms on the second section of the fall board; an upright back fall behind such fall board forming the front of the piano case, sliding blocks secured to the back fall and projecting into the interior of the piano body; parallel shoulders projecting from either side of the piano body and between which said sliding blocks move and are guided, the links having pivotal connection with the sliding blocks, and when moved inward by the lifting of the second section, pushing inward the blocks so that when the second section is tipped, the upright back fall will be caused to move inward guided by the sliding blocks and leaving an open space for the reception of the second section, which then becomes raised to an upright position.

2. In a piano, the piano body having a fall board composed of two sections hinged together, the front section extending down over the outer ends of the key bars, its inner edge hinged to the second section, and so

connected as to permit of its being folded
over back upon the second section, the sec-
ond section hinged on its inner edge to the
piano body, and capable of being raised by
5 this hinged connection into an upright posi-
tion, carrying with it the first section folded
over upon it; said piano body having an up-
right movable front, having on each end
arms extending within the body and parallel
10 with the sides of the body, inclined guides
carried by the piano body to receive said
arms, each arm having link connection with
the second section of the fall board.

3. The combination with a piano or like
15 instrument, of a fall board protecting the
keys thereof, a back fall in rear of the fall

board and adapted to be shifted backward
into the piano case, downwardly and rear-
wardly inclined arms carried by the back
fall, similarly inclined guides on the sides of
the piano to receive said arms and direct the
fall board, and connections between the fall
board and back fall to cause the back fall to
retreat into the piano case as the fall board is
opened.

In testimony whereof I have affixed my
signature, in presence of two witnesses.

CLARENCE E. PRYOR.

Witnesses:

FLINT W. WRIGHT,
A. G. HALL.

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