

F. C. WHITE.
 PEDAL FOLDING APPARATUS.
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Fig. 1.

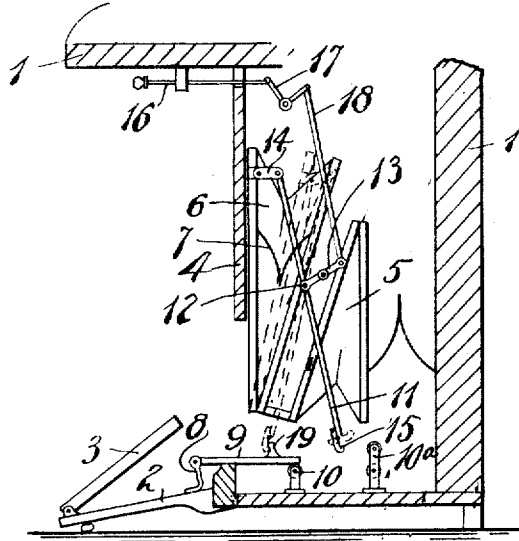
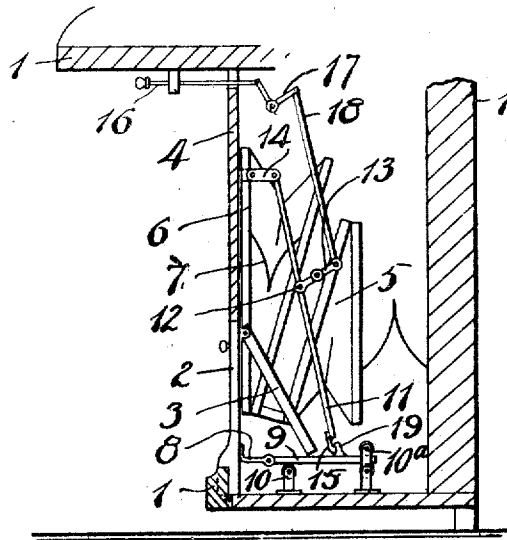


Fig. 2.



Witnesses:

Chas. A. Rice
Fred. W. Dunnington

Inventor

F. C. WHITE.

Barrett & Brown
Attorneys

UNITED STATES PATENT OFFICE.

FRANK C. WHITE, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE WILCOX & WHITE COMPANY, OF MERIDEN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

PEDAL-FOLDING APPARATUS.

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To all whom it may concern:

Be it known that I, FRANK C. WHITE, a citizen of the United States, residing at Meriden, New Haven county, Connecticut, have invented certain new and useful Improvements in Pedal-Folding Apparatus, of which the following is a full, clear, and exact description.

My invention relates to improvements in mechanical piano playing instruments.

The object of the invention is to provide means for mechanically returning the foot pedals of the pumping apparatus to an idle position wherein they are concealed from view, usually within the case of the instrument.

In the accompanying drawing, Figure 1 conventionally represents a portion of a player-piano, so-called; the foot pedal being extended ready for use and said view showing such other parts as are essential to an understanding of the principle of my invention in one preferred form thereof. Fig. 2 is a similar view, showing the foot pedals folded back out of the way.

In the drawing, 1-1 represent parts of the piano case or housing, 2 represents the pedal board of conventional form hinged to the front under side of said case in a proper position to carry a foot pedal 3, which when the pedal board 2 is in the position shown in Fig. 1, stands in a position ready for operation; and, which, when the pedal board is folded up as shown in Fig. 2, is out of the way and hidden from view within the instrument case. The pedal 3 is operatively connected with the feeder bellows 5 in the usual well known manner (not shown), the latter being connected with the equalizing bellows 6 in the usual manner. The equalizing bellows is distended by means of the usual spring 7 and collapsed by the bellows 5.

8 is a lever arm connected to the pedal board.

9 is a slide connected at one end to the lever arm 8 and guided within the case by anti-friction supports 10-10^a.

11 is a lever pivoted at 12 on a walking beam 13 and connected at its end to the movable board of the equalizing bellows by a link 14. The lower end of the lever 11 is provided with a hook or latch 15.

The operating device for the walking beam 13 comprises a manually controlled slide 16 conveniently located near the key-

board of the piano, for example, under the same. This slide 16 is connected by a bell crank 17 and rod 18 with walking beam 13.

It should be understood that the above description relates only to that form of my invention shown in the accompanying drawing and that many modifications may be resorted to without departure from the spirit or scope of my invention, any suitable mechanism by which the desired end is attained being regarded by me as within the scope of the invention.

In operation, when the slide 16 is pulled out, as shown in the accompanying drawing, the rod 11 is moved down in such a manner that if the equalizer bellows is collapsed by pumping a few extra strokes, the latch or catch 15 at the lower end of the rod will engage back of an abutment 19 on the slide 9. If the foot is then removed from the pedal, the opening movement of the equalizing bellows, effected by spring 7, will operate to move the lever 11 to the position, or approximately the position, shown in the drawing, and since the lower end of said lever is now connected with slide 9, it follows that as the slide is drawn in, the pedal board 2 will be folded up into the same plane as the front lower panel 4, retiring the pedal or pedals 3 from view and within the case of the piano. To free the pedal board 2, the slide 16 is pushed in. This movement lifts the lever 11, freeing catch 15 from the abutment 19 of slide 9, which latter may then be lowered, either manually or by gravity, or in any other well known manner. I have shown the pedal retiring lever 11 as connected in this instance to the equalizing bellows 6, but obviously this is only one convenient means for mechanically operating said lever.

It will be seen that the apparatus described presents unique advantages, whereas, in the ordinary instrument of this character, it was necessary to manually lift the pedal board to retire the pedal from view, that act is now performed mechanically, the operator in this particular instance being merely required to pump vigorously upon the foot pedal until the equalizer 6 is collapsed. If the slide 16 is in the proper position, the catch 15 engages the abutment 19 after which the closing of the pedal board and retirement of the pedal is mechanically effected by the expansion of the

equalizing bellows. During the playing of the instrument, the lever 11 is shifted so as to clear the abutment 19.

What I claim is:

- 5 1. In an instrument of the character described, a case, a foot pedal, a carrier therefor arranged when in one position to present said pedal for operation and when in another position to retire said pedal within
10 the case, and a manually controllable power device for shifting said pedal support and pedal from the operative or extended position to the inoperative or retired position.
- 15 2. In an instrument of the character described, a case, a foot pedal, a carrier therefor arranged when in one position to present said pedal for operation and when in another position to retire said pedal within
20 the case, and a manually controllable power device for shifting said pedal support and pedal from the operative to the inoperative or retired position, said power device including a bellows and a connection between
25 said bellows and the parts to be shifted.
- 25 3. In an instrument of the character described, a case, a foot pedal, a carrier therefor arranged when in one position to present said pedal for operation, and when in another position to retire said pedal within
30 the case, and a manually controllable power device for shifting said pedal support and pedal from the operative to the inoperative or retired position, said power device including a normally distended equalizer bellows and a connection between the movable
5 part of said bellows and the parts to be shifted.
4. In an instrument of the character de-

scribed, a case, a foot pedal, a carrier therefor arranged when in one position to present said pedal for operation, and when in another position to retire said pedal within the case, and a power device for shifting said pedal support and pedal from the operative to the inoperative or retired position, said power device including a normally distended equalizer bellows and a connection between the movable part of said bellows and the parts to be shifted, and manually controllable means operatively connected with said power device whereby the latter may be manually moved into and out of the operative position.

5. An instrument of the character described, including bellows and means for operating the same, a foot pedal, a movable support therefor arranged to hold said foot pedal in operative position and arranged to hold said foot pedal in an inoperative or "out of the way" position, and a power device for shifting said pedal supporting means and pedal to the last mentioned position, and a controlling device for moving said power device into and out of its operative position.

6. In a musical instrument, the combination of pedal mechanism movable into and from operable position, self-acting means for moving said mechanism from said position, and a device to prevent or permit movement of such mechanism by said means.

FRANK C. WHITE.

Witnesses:

R. C. MITCHELL,
CHAS. A. PEARCE.