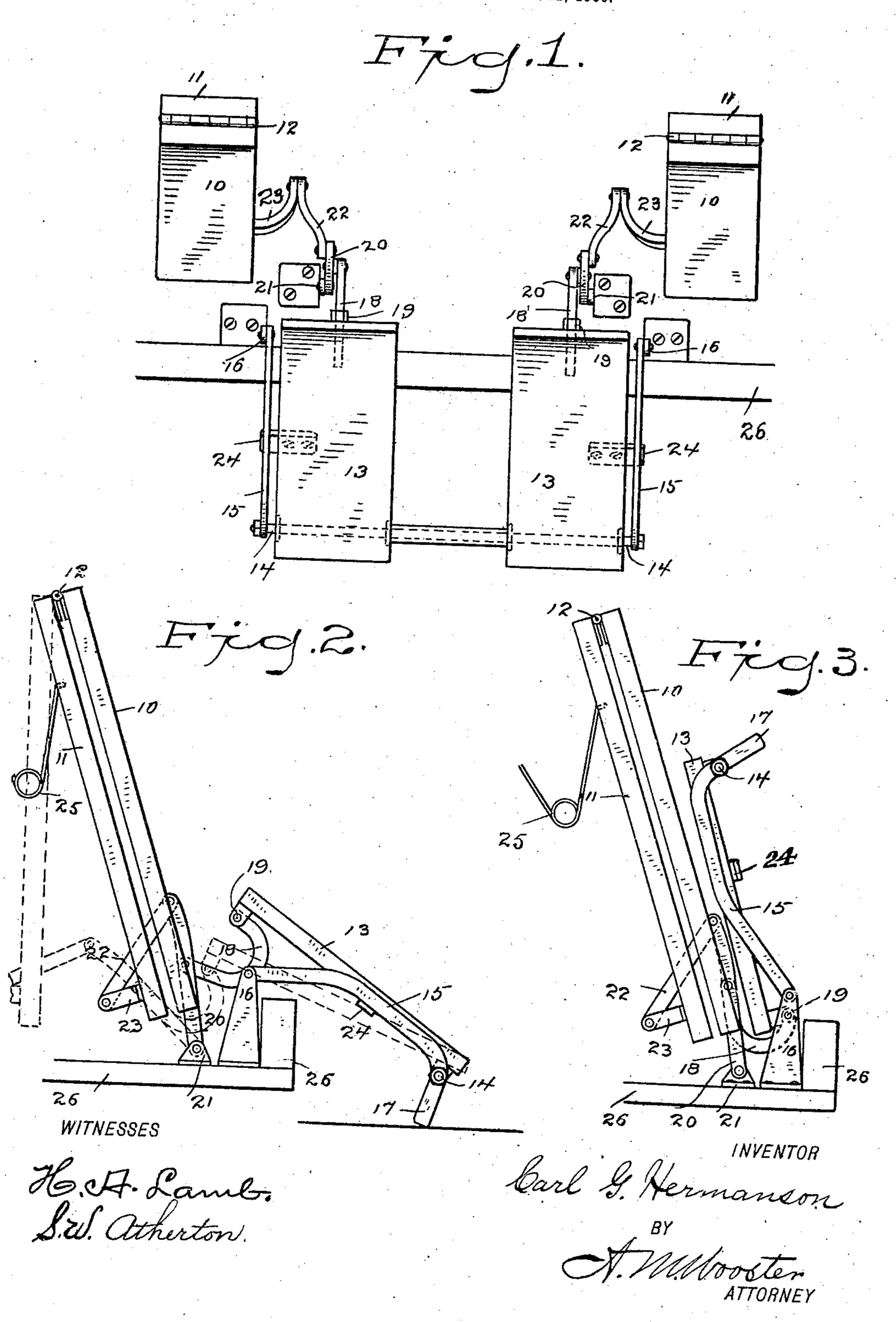
## C. G. HERMANSON. PEDAL ACTION FOR PIANO PLAYERS. APPLICATION FILED SEPT. 12, 1906.



## STATES PATENT

## CARL G. HERMANSON, OF DERBY, CONNECTICUT.

## PEDAL-ACTION FOR PIANO-PLAYERS.

No. 848,366.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed September 12, 1906. Serial No. 334,262.

To all whom it may concern:

Be it known that I, CARL G. HERMANSON, Derby, county of New Haven, State of Con-5 necticut, have invented a new and useful Pedal-Action for Piano-Players, of which the

following is a specification.

This invention has for its object to provide a simple, inexpensive, and thoroughly practo tical pedal-action for piano-players that will fold upward and inward out of the way, it being an essential requirement in a device of this character that it comprise the smallest possible number of parts and that the parts 15 be combined in such a manner as to be thoroughly durable and certain and noiseless in action.

With these and other objects in view I have devised the novel pedal-action which I 20 will now describe, referring to the accompanying drawings, forming a part of this specification, and using reference characters to in-

dicate the several parts.

Figure 1 is a plan view illustrating my 25 novel pedal-action in operative position; Fig. 2, a side elevation corresponding therewith, and Fig. 3 is a side elevation showing the parts in the folded position.

10 denotes the front plate, and 11 the back 30 plate of the bellows, which are hinged together, as at 12. The front plate is ordinarily fixed in position, and the back plate is mov-

able relatively thereto.

13 denotes the pedals, which oscillate upon 35 a cross-rod 14, carried by arms 15, the rear ends of which are pivoted to any suitable fixtures, as to brackets 16. The front ends of arms 15 are shown as curved downward at an angle to the arms proper to adapt them to 40 serve as supports for the pedals in the operative position. These supports are indicated by 17 and are shown in Fig. 2 as resting upon the floor, which is indicated by a line.

18 denotes U-shaped arms which are piv-45 oted to the rear ends of the pedals, as at 19, the other ends of said arms being pivoted to levers 20 at approximately the mid-length of said levers. These U-shaped arms receive the rear ends of the pedals in the folded or 50 inoperative position, as in Fig. 3. The lower ends of the levers are pivoted to suitable fix-

tures, as to brackets 21.

22 denotes links whose ends are pivoted, respectively, to the upper ends of the levers 55 and to arms 23, which extend from the back plates of the bellows, it being understood, of l

N, course, that two pedals are provided and that each pedal is connected with an indea citizen of the United States, residing at | pendent bellows, so that the pedals and bellows may be operated simultaneously or al- 60

ternately, as may be preferred.

24 denotes stop-lugs extending from the pedals, which engage arms 15 to limit the upward movement of the pedals in swinging them to the folded position, as in Fig. 3. 05 The return movement of the pedals in use is produced by suitable bellows-springs, as

springs 25.

The operation will be readily understood from the drawings. In Fig. 2 I have illus- 70 trated in full lines a pedal and bellows in the normal position and in dotted lines the position of a pedal and bellows at the extreme of their movement. In the folded or inoperative position the pedals are swung upward 75 and over out of the way, as in Fig. 3, the rear ends of the pedals lying in the curves of the U-shaped arms and are received in a recess in the case of the player, (indicated by 26.) In use the pedals are swung downward to the 80 position shown in Fig. 2, supports 17 resting upon the floor. The operation of the pedals is, as usual, simply a downward swing of the rear ends thereof from the fulcrum on crossrod 14.

Having thus described my invention, I

claim-

1. A device of the character described comprising a folding pedal, a U-shaped arm pivoted to the rear end of the pedal and receiv- 90 ing said rear end in the folded position of the pedal, a lever to whose mid-length the opposite end of the U-shaped arm is pivoted and a link pivoted to said lever.

2. A device of the character described com- 95 prising a folding pedal, a U-shaped arm pivoted to the rear end of the pedal and receiving said rear end in the folded position of the pedal, a lever one end of which is pivoted to a fixed part and to whose mid-length the oppo- 100 site end of the U-shaped arm is pivoted, and a link pivoted to the free end of the lever.

3. A device of the character described comprising pedals, a cross-rod on which the front ends of the pedals are pivoted, arms 15 by 105 which the cross-rod is carried and whose rear ends are pivoted to fixed parts, U-shaped arms pivoted to the rear ends of the pedals which receive said pedals in the folded position, levers to whose mid-length the opposite 110 ends of the U-shaped arms are pivoted and which are pivoted to fixed parts, bellows and

links connecting the free ends of the levers to

the bellows respectively.

4. A device of the character described comprising pedals, a cross-rod on which the front ends of the pedals are pivoted, arms 15 by which the cross-rod is carried and whose rear ends are pivoted to fixed parts and whose front ends are provided with supports for the pedals in the operative position, U-shaped arms pivoted to the rear ends of the pedals and receiving said pedals in the folded position, levers to whose mid-length the opposite ends of the U-shaped arms are pivoted and which are pivoted to fixtures, bellows and links connecting the free ends of the levers to the bellows respectively.

5. A device of the character described comprising pedals, a cross-rod on which the front ends of the pedals are pivoted, arms 15 by which the cross-rod is carried and whose rear ends are pivoted to fixed parts, stop-lugs extending from the pedals and engaging the arms to limit the upward movement of the

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pedals, U-shaped arms pivoted to the rear ends of the pedals and receiving said pedals 25 in the folded position, levers to whose midlength the opposite ends of the U-shaped arms are pivoted and which are pivoted to fixed parts, bellows and links connecting the free ends of the levers to the bellows respectively.

6. A device of the character described comprising folding pedals, U-shaped arms pivoted to the rear ends of the pedals and receiving them in the folded position of the pedals, 35 levers to whose mid-length the opposite ends of the U-shaped arms are pivoted, bellows having arms 23 extending therefrom and links

pivoted to said arms and to the levers.
In testimony whereof I affix my signature 40

in presence of two witnesses.

CARL G. HERMANSON.

Witnesses:

ROBERT W. Munson, Geo. H. Harding.