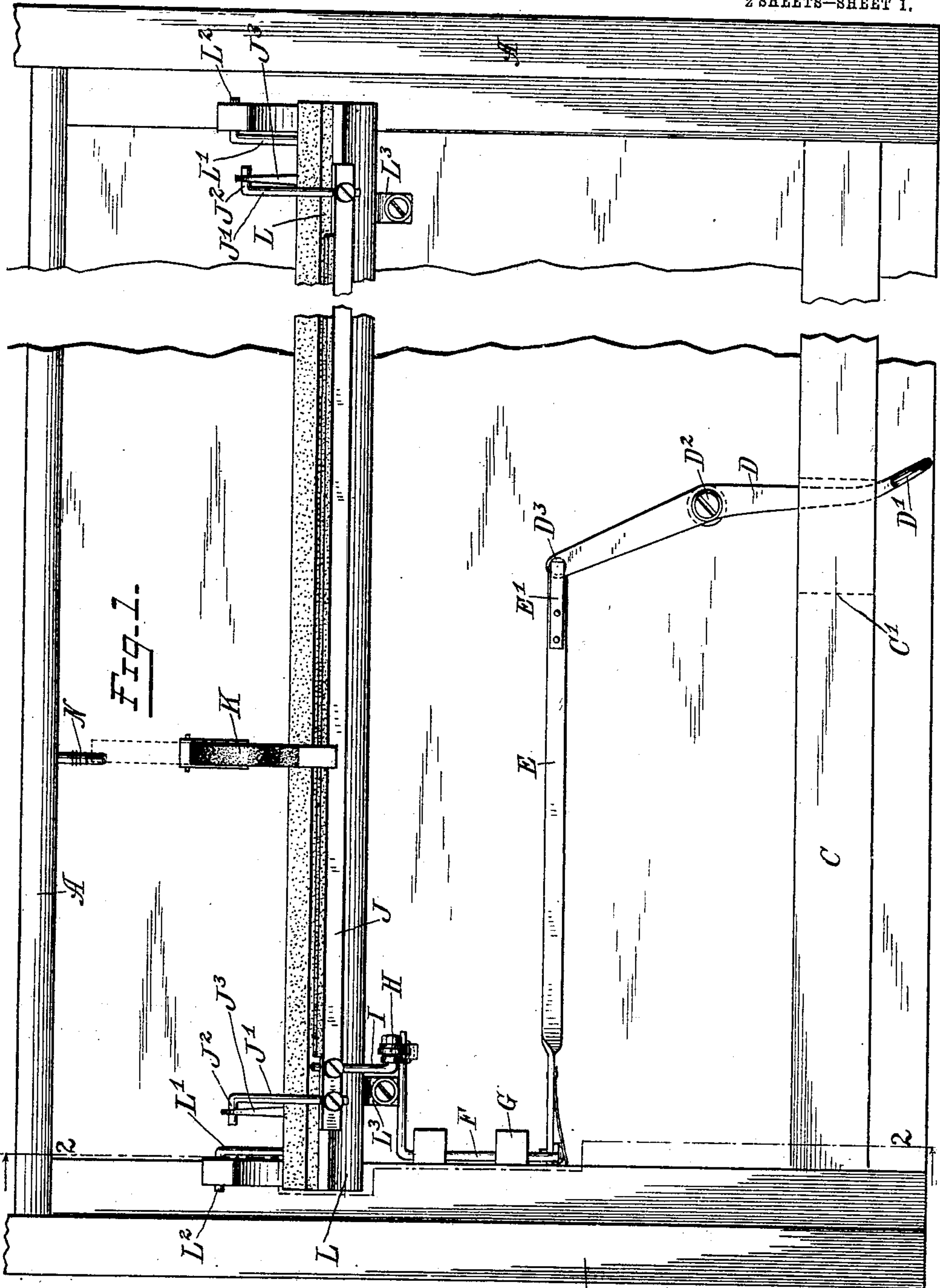


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J. D. PEASE.
PIANISSIMO DEVICE.
APPLICATION FILED MAY 26, 1907.

Patented Apr. 27, 1909.
2 SHEETS—SHEET 1.



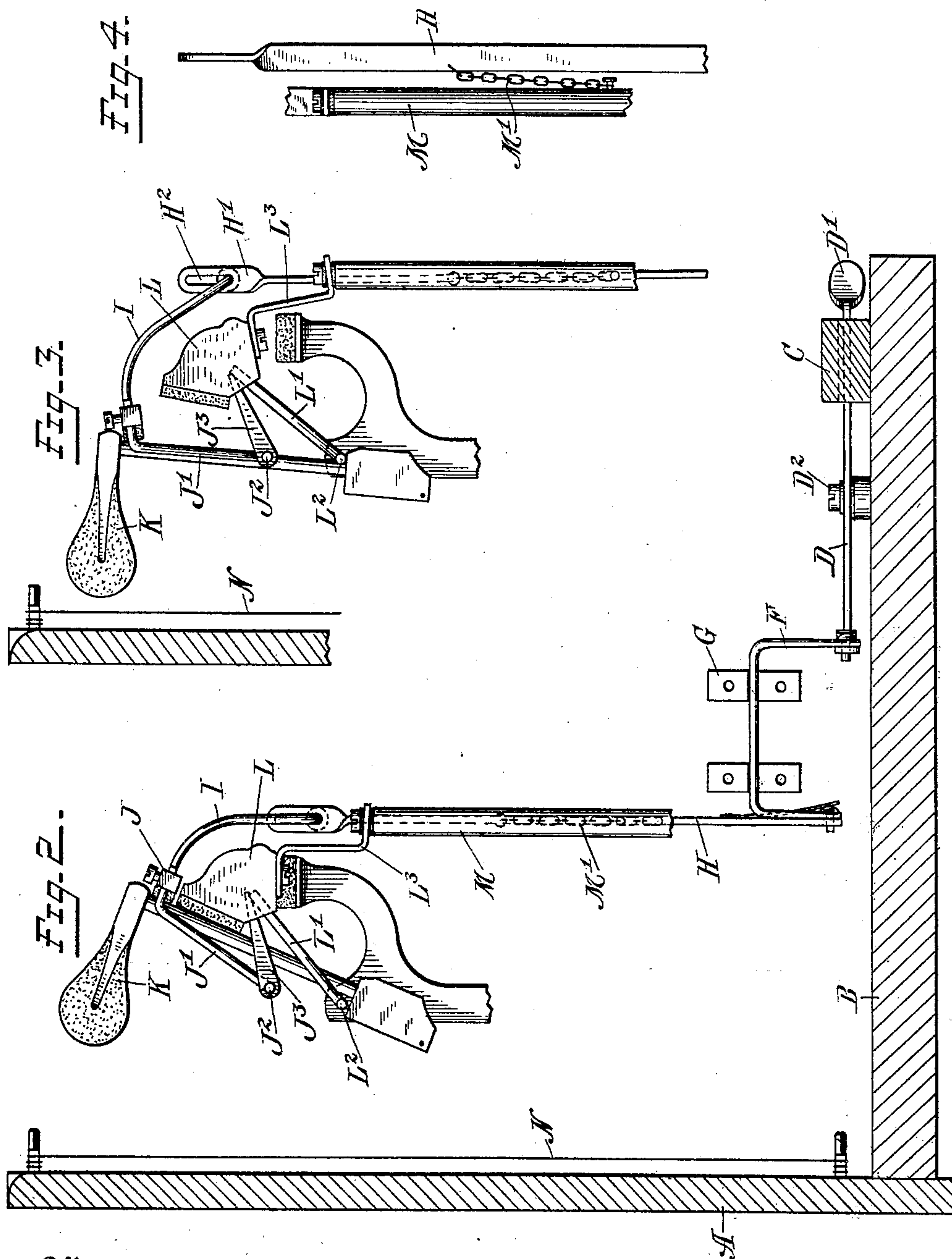
Witnesses:
G. V. Rasmussen
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By his Attorneys
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J. D. PEASE.
PIANISSIMO DEVICE.
APPLICATION FILED MAY 25, 1907.

Patented Apr. 27, 1909.
2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JOHN D. PEASE, OF NEW YORK, N. Y.

PIANISSIMO DEVICE.

No. 919,632.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed May 25, 1907. Serial No. 375,624.

To all whom it may concern:

Be it known that I, JOHN D. PEASE, a citizen of the United States, and resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Pianissimo Devices, of which the following is a specification.

My invention relates to pianos and more particularly to pianissimo devices for use in automatic pianos, and has for its object to provide a device of this kind which is simple in construction and effective in operation.

To this end, my invention consists in certain construction and combination of parts which will be fully described hereinafter, and the features of novelty will be pointed out in the appended claims.

Reference is to be had to the accompanying drawings in which—

Figure 1 is a plan view of as much of a piano as is necessary to illustrate my invention, showing my improved device applied thereto; Fig. 2 is an elevation thereof; Fig. 3 is a similar view showing the parts in a different position and Fig. 4 is a detail front view of a portion of my device.

A represents the case of the piano and B the keyboard bed on which is secured a rail C, having a slot C' through which projects the lever D, having an operating finger piece D'. This lever D is pivoted at D² to the bed B, and has its one end pivotally secured at D³ to a link E. If desired this connection may comprise a pin which is secured to the link E and extends through an opening in the lever D, being secured in position by a leaf or flat spring E'. The other end of the said link E may be similarly connected with a U-shaped member F journaled in suitable bearings G, and connected by means of a rod H. This rod H is provided with a flattened portion H' having a slot H² through which projects the end of a member I which is secured to the auxiliary hammer rest rail J against which the hammers K are arranged to rest. This auxiliary hammer rest rail J is carried by supports J' which are pivoted at J² to brackets J³ secured to the usual hammer rest rail L. This main hammer rest rail L is carried by supports L' pivoted at L² to a stationary part of the instrument, and is connected by means of a member L³ with the pedal rod M, to which the usual soft pedal is connected. This rod M is connected

to the rod H by means of a flexible connection such as a chain M' which in the normal position of the parts is slack for the purpose to be more fully described hereinafter. 60

N represents the strings.

As the finger piece D' is moved to the left in Fig. 1, the lever D will be swung on its pivot D² and will move the link E to the right in Fig. 1. This will cause the U-shaped member F to be swung in its bearings and will cause the rod H to be raised. The raising of this rod H swings the auxiliary hammer rest rail J, through the connecting member I, on the pivot J² and thus brings the hammers nearer to the strings N. The point to which the hammers are brought is governed by the distance the finger piece D' is moved by the operator and may be varied to suit the requirements of the selection being played. During the raising of the rod H as described the chain M' is first stretched taut after which the rod M is carried along so that the auxiliary hammer-rest-rail first moves relatively to the main hammer-rest-rail and then moves it in the same way as when the usual soft pedal is operated. The auxiliary hammer-rest-rail, through the shifting of the pivot J², as the main hammer-rest-rail is carried along, is always maintained in the same position relatively to the hammer shanks, which thus are always engaged by the auxiliary hammer-rest-rail at the same point, in all positions of said auxiliary rail. In other words the purpose of making the main hammer-rest L follow the movement of the auxiliary hammer-rest-rail J to a certain extent, is to shift the fulcrum J² of the supports J', thereby preventing rubbing action by any material movement of the auxiliary hammer-rest-rail J along the hammer shanks. 95

It is to be understood that a wider range of positions and a finer adjustment of the hammers is secured in using my improved device, than can be obtained by the use of the usual soft pedal. This is due to the fact that the lever D' is operated manually and its position may therefore be gaged more accurately than that of the soft pedal which is depressed by the foot and which therefore is not so thoroughly under the control of the player. When the instrument is played by hand, the soft pedal may be used, in which case the main hammer-rest-rail L will be swung on the pivot L² in the usual way and will carry with it the auxiliary hammer-rest-rail as soon as the main hammer-rest-rail comes into en- 110

gement with the supports J' causing the end of the member I to ride up in the slot H² without moving the rod H. It is to be further understood that when the lever D is operated the rod H is raised in a direction perpendicular to the base of the instrument and that there is no side motion, resulting in a smooth operation without undue friction.

10 In using my device, a wide range of action is secured, that is the strength of a note or chord may be very finely graduated, so that it is possible to render a selection with proper graduation and feeling.

15 Various modifications may be made without departing from the spirit of my invention as defined in the claims.

I claim:

20 1. In a piano, the combination with the hammer, of a main hammer-rest-rail movable to different positions and an auxiliary hammer-rest-rail movable to different positions relatively to the main hammer-rest-rail, the two rails being arranged to engage the hammer shanks at different points and the hammers being in engagement with both rails in the position of rest.

30 2. In a piano, the combination with the hammers, of a pivoted main hammer-rest-rail, movable to different positions, and an auxiliary hammer-rest-rail pivotally connected with said hammer rest rail at a distance from the fulcrum of said main hammer rest-rail.

3. In a piano, the combination with the hammers, of a main hammer-rest-rail movable to different positions, an auxiliary hammer-rest-rail, which in the position of rest lies in the same plane with the main rail, both of said rails in the position of rest being engaged by the hammers, and means for moving said auxiliary hammer-rest-rail toward the strings relatively to the main hammer-rest-rail.

4. In a piano, the combination with the hammers, of a movable main hammer-rest-rail, means for moving said rail, an auxiliary hammer-rest-rail, means for moving the auxiliary hammer-rest rail relatively to the main hammer-rest-rail, and a flexible connection between said two operating means.

5. In a piano, the combination with the hammers, of a main hammer rest rail, movable to different positions, an auxiliary hammer rest rail movable relatively to the main hammer rest rail, means for moving the main hammer rest rail, mechanism for moving the auxiliary hammer rest rail and a pin-and-slot connection between the auxiliary hammer rest rail and said mechanism.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN D. PEASE.

Witnesses:

G. A. SCOFIELD,
GEO. N. TAYLOR.