No. 614,340. Patented Nov. 15, 1898.

# E. PETERSON.

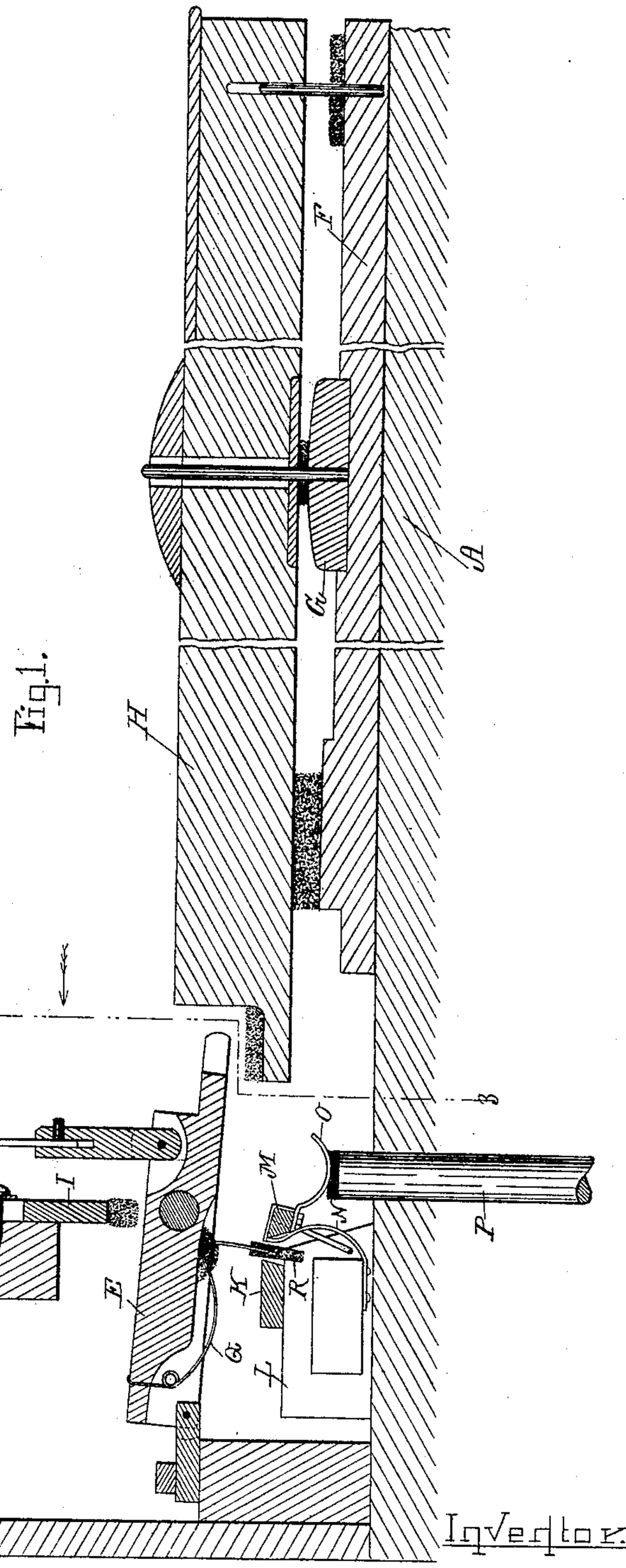
## ATTACHMENT FOR PIANOS.

(Application filed Oct. 8, 1897.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.




Witnesses.

Lauritz N. Koller

Charles A. Harris.

Inventor.

Emanuel Peterson
by Alban Andrén his atty

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# E. PETERSON.

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(Application filed Oct. 8, 1897.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 2.

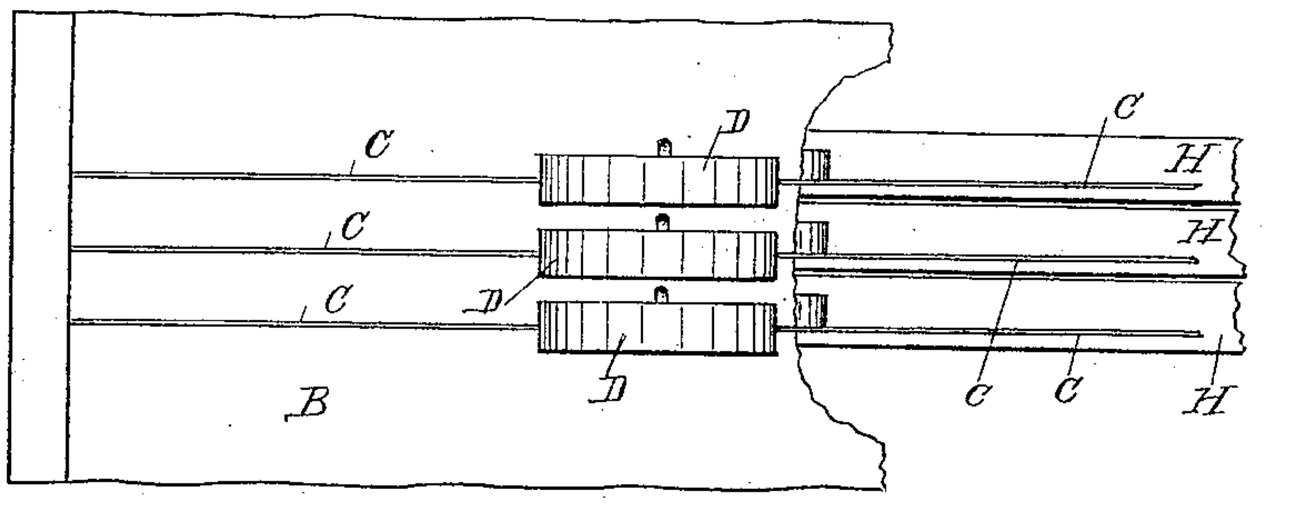
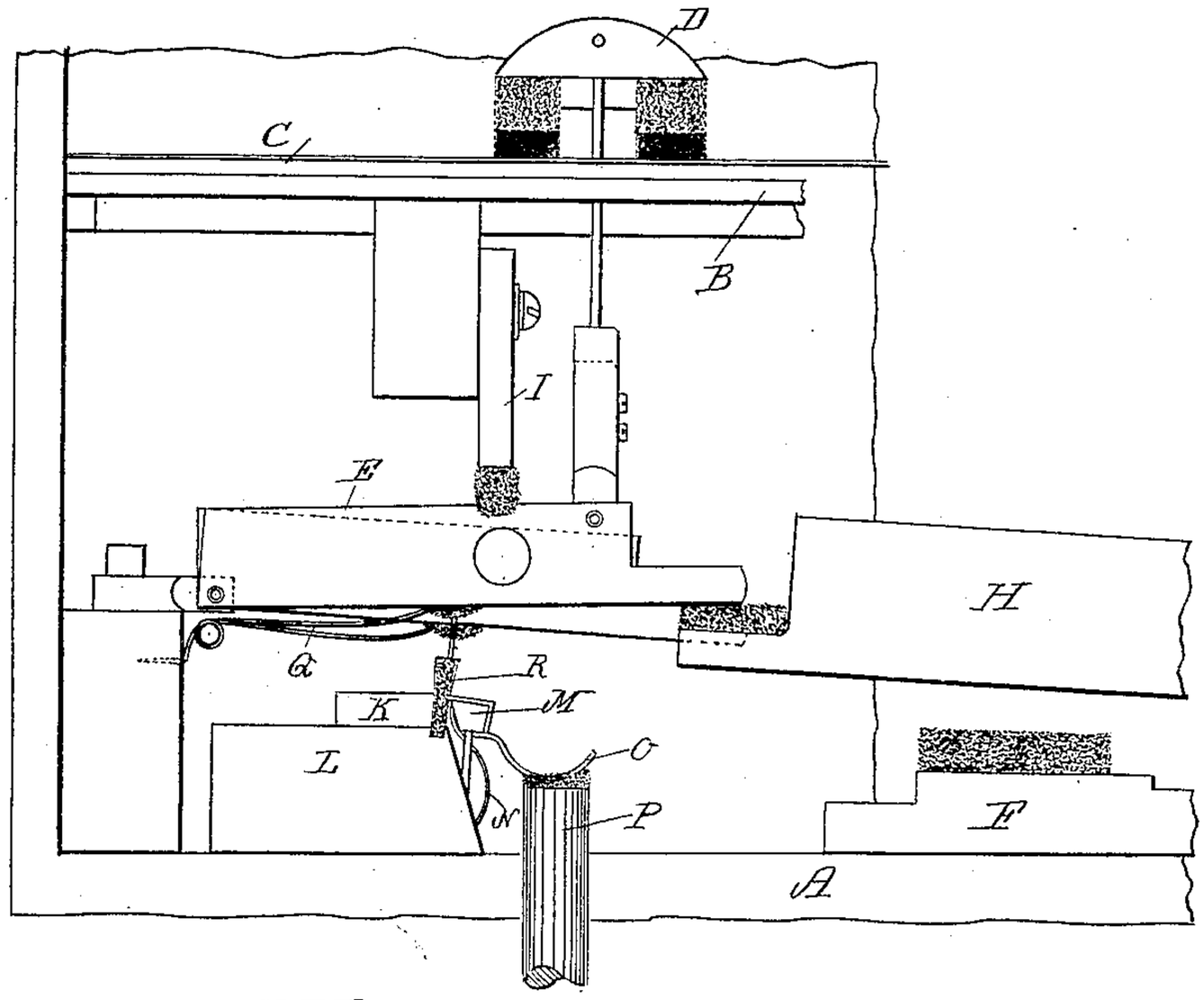



Fig. 4.



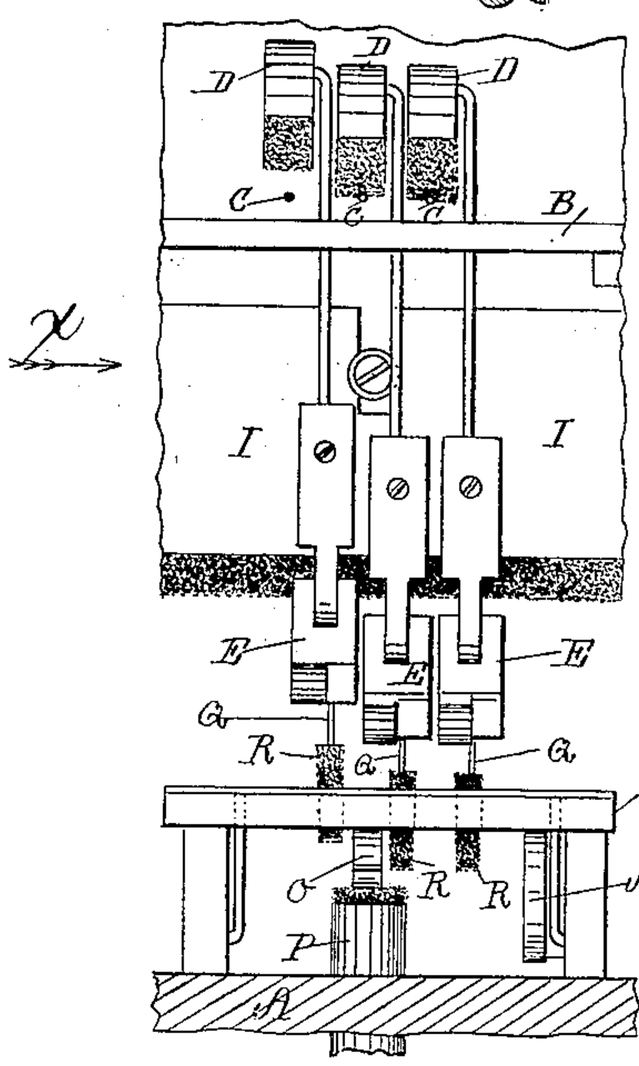




Fig. 3.

Witnesses.

Lauritz N. Möller.
Charles A. Harris

Inventor:

Emanuel Peterson
by Milton Andrews
his atty

# UNITED STATES PATENT OFFICE.

EMANUEL PETERSON, OF EVERETT, MASSACHUSETTS.

## ATTACHMENT FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 614,340, dated November 15, 1898.

Application filed October 8, 1897. Serial No. 654,599. (No model.)

*To all whom it may concern:*

Be it known that I, EMANUEL PETERSON, a citizen of the United States, and a resident of Everett, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Sostenuto Attachments for Pianos, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in sostenuto attachments for pianos for the purpose of holding up by means of a pedal and intermediate mechanism one or more of the dampers that happen to be raised when the pedal is pressed down, so that a selected tone or tones may be prolonged or sustained at will after the performer has released the pressure on the selected key or keys, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 represents a longitudinal section of the invention, showing the sostenuto pedal-rod in its normal position. Fig. 2 represents a top plan view of the sounding-board, strings, and dampers. Fig. 3 represents a vertical section on the line 3 3 in Fig. 1, showing one of the damper-levers raised; and Fig. 4 represents a side elevation seen from X in Fig. 3.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In the drawings, A represents the key-bottom of a piano, in which B is the sounding-board, C C C the strings, and D D D the dampers, connected to the pivoted damper-levers E E E, as usual.

F is the key-frame, G the balance-rail, and H H H the keys pivotally connected to the balance-rail and having their rear ends projecting below the damper-levers E E E, as is common in devices of this kind.

I is the stop-bar for limiting the upward motion of the damper-levers when actuated by the keys H, as usual.

To the key-bottom A or other stationary part of the instrument is attached a stationary clutch K, and to said key-bottom or brackets L L thereon is pivotally connected a movable clutch or clutch-bar M, which is normally held disengaged by means of a suitable spring N, as shown in Fig. 1. To the movable clutch or clutch-bar M is attached a lever O, resting on the top of the pedal-rod P, which is actuated by a pedal-lever attached to the bottom of the instrument in the usual manner of pedal action, such pedal being, however, not shown in the drawings.

Q Q represent springs which may be attached to the damper-levers E E, as shown in Fig. 1, or to the frame or other stationary part of the instrument, as shown in Fig. 4. Instead of said springs may be used any other suitable or well-known yielding support arranged between the damper-lever and the clutch mechanism. Each of such springs is adapted to bear against the under side of the respective damper-lever E and is bent downward between the stationary and movable clutches K M and there provided, preferably, with a felt or other elastic cushion R, as shown in the drawings.

I do not wish to confine myself to the use of elastic cushions R on the springs or supports Q, as, if so desired, such parts R may be non-elastic and notched or corrugated for the more secure interlocking with the clutches.

The operation is as follows: If a key or keys are depressed and the note or notes thereon are to be sustained, the pedal-rod P is raised after the key or keys are depressed and before the performer moves his or her fingers from such keys, causing the clutch-bar M to hold the cushion or support R, damper-lever E, and its damper N raised above the string C, thus sustaining or prolonging the sound, note, or chord on such string or strings while playing a melody, accompaniment, or otherwise with the hand or hands. It will thus be seen that after a key or keys have been depressed and the pedal-rod P raised before removing finger-pressure on the key or keys the damper or dampers on the respective keys that are struck are automatically held raised above the strings, thus sustaining or prolonging the sound or sounds for the purpose stated.

What I wish to secure by Letters Patent and claim is—

1. In a sostenuto attachment for pianos, the combination with a damper-lever, of a stationary clutch-bar and a movable clutch-bar, both arranged below the damper-lever, a yieldable support attached to said damper-lever, a cushion-block attached to the end of

said support and normally lying between said clutch-bars, and a pedal-rod arranged to act upon the movable clutch-bar, as and for the purpose described.

2. In a sostenuto attachment for pianos, the combination with a damper-lever, of a stationary clutch-bar and a movable clutch-bar, both arranged below the damper-lever, a yielding support attached to and depending from said damper-lever, a cushion-block attached to the end of said support and normally lying between the said clutch-bars, a spring for normally holding the movable clutch-bar away from the stationary clutch-bar, and a pedal-rod arranged to act upon the said movable clutch-bar, as and for the purpose described.

3. In a sostenuto attachment for pianos, the combination with a pivoted damper-lever, of a stationary clutch-section and a movable clutch-section, a spring attached to and depending from the said damper-lever, a flexible cushion or support attached to said spring and normally lying between the clutch-sections, a projection on the movable clutch-section, and a vertically-movable pedal-bar lying directly below the said projection and adapted to actuate the latter and the movable clutch-section, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 25th day of September, A. D. 1897.

EMANUEL PETERSON.

Witnesses:

ALBAN ANDRÉN,

FRANK T. BARKER.