

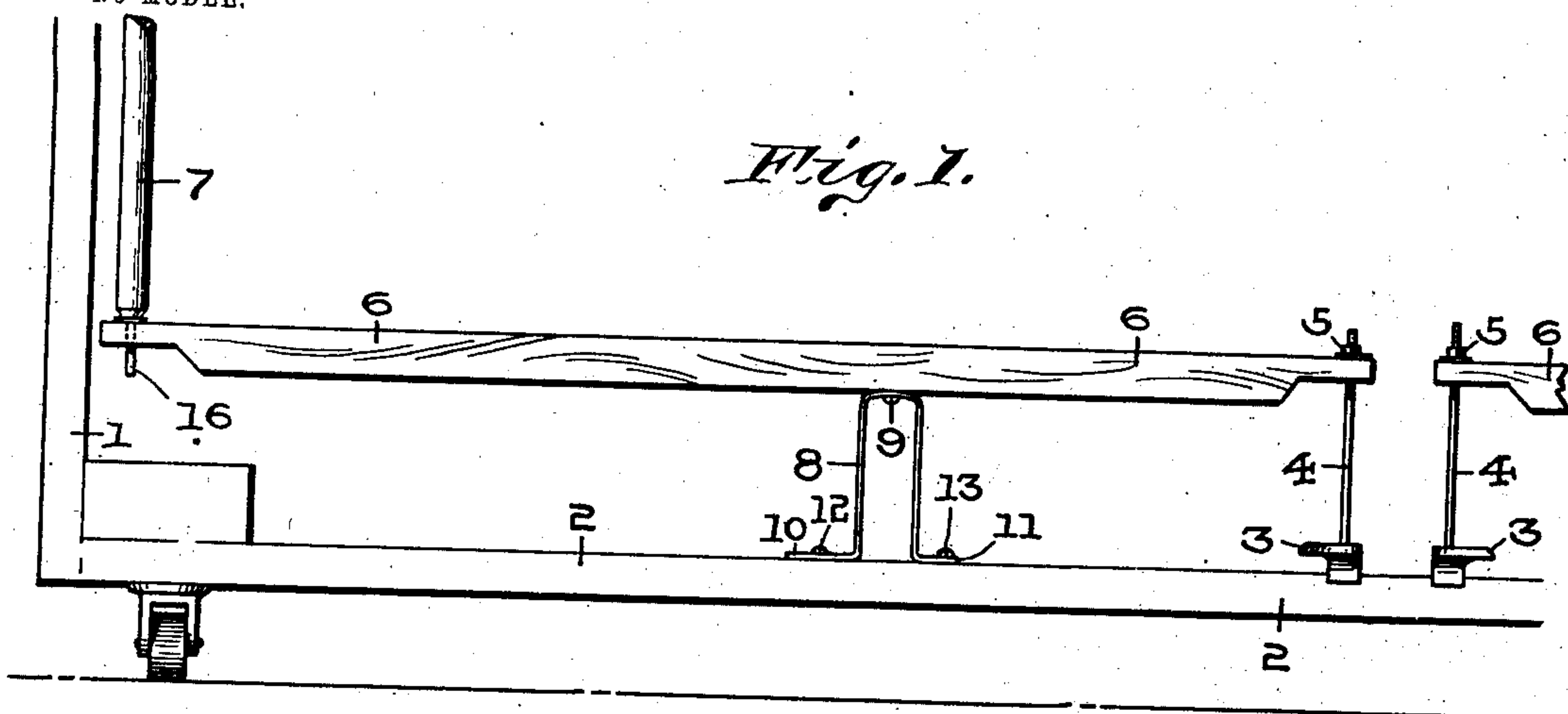
No. 724,555.

PATENTED APR. 7, 1903.

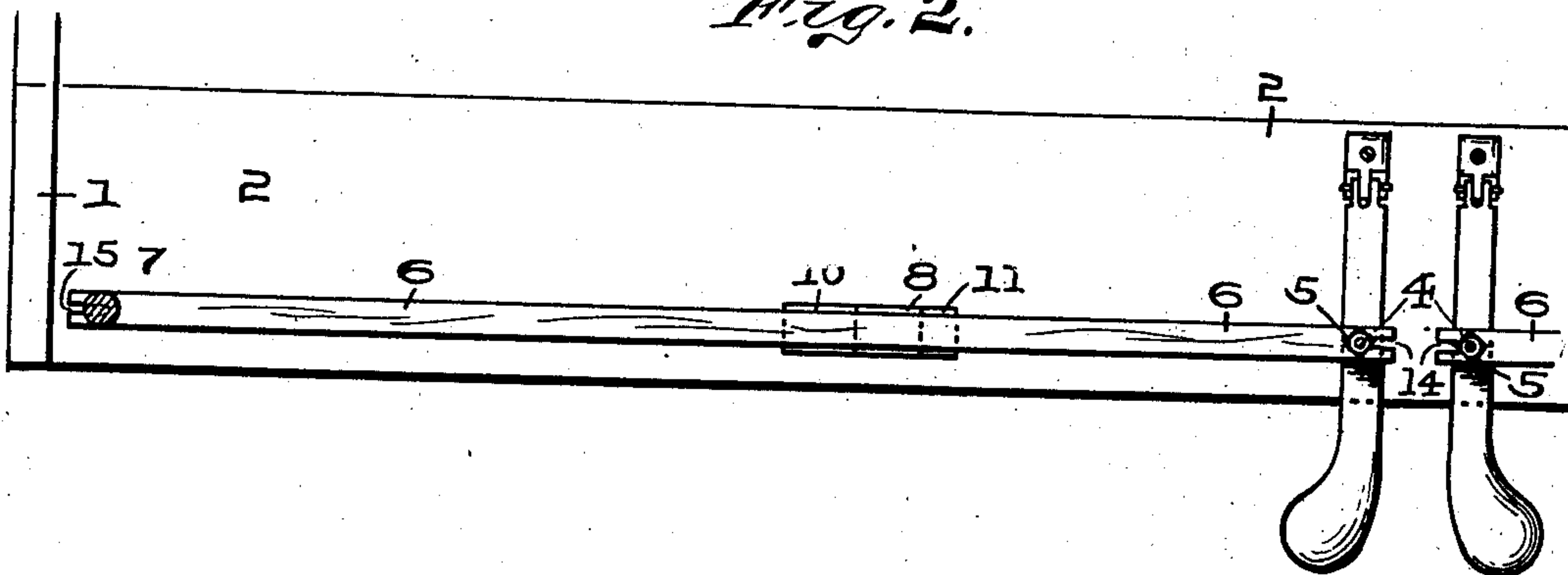
J. DIERDORF,  
PEDAL ACTION FOR PIANOS.  
APPLICATION FILED MAR. 15, 1902.

NO MODEL.

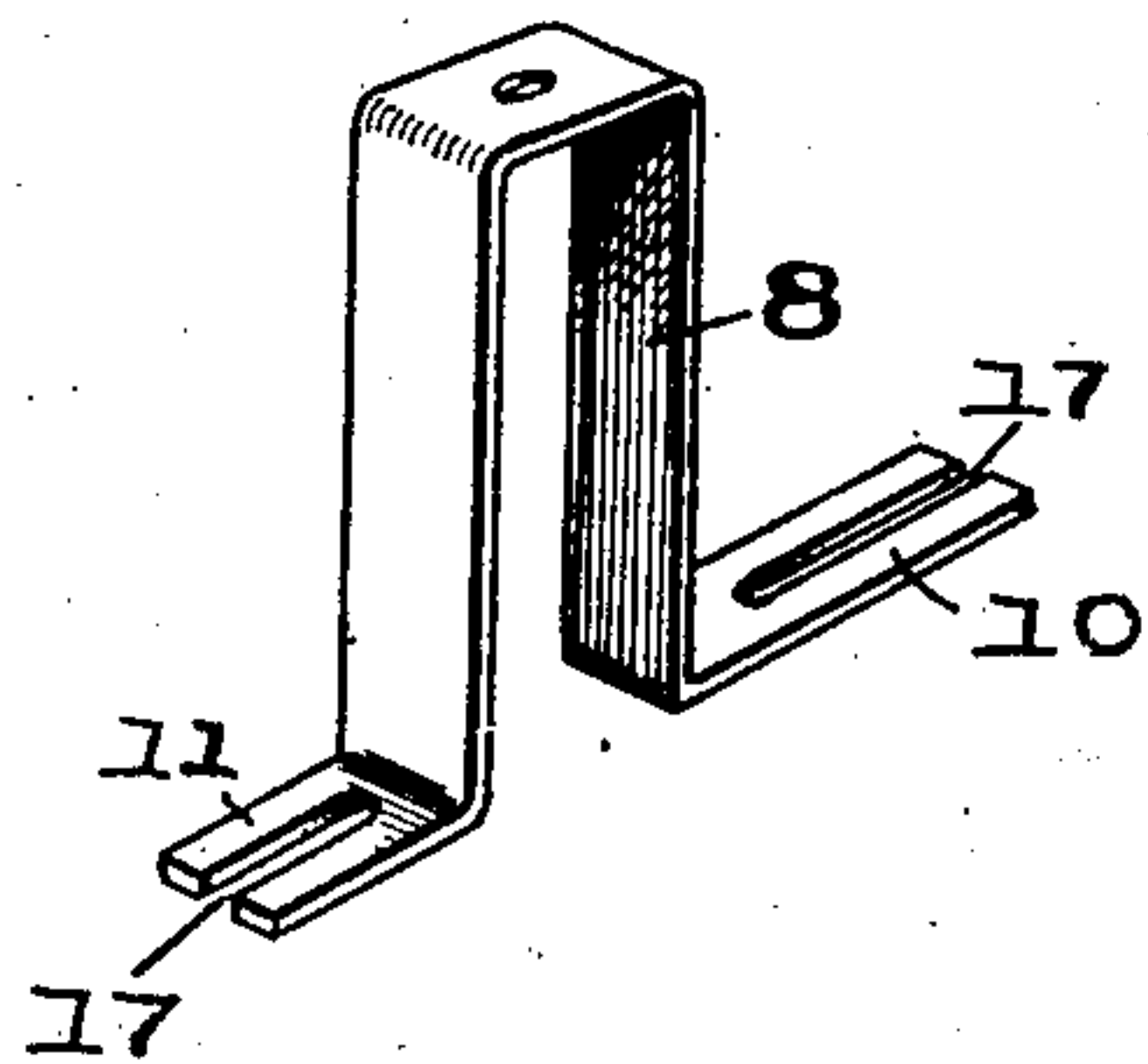
*Fig. 1.*



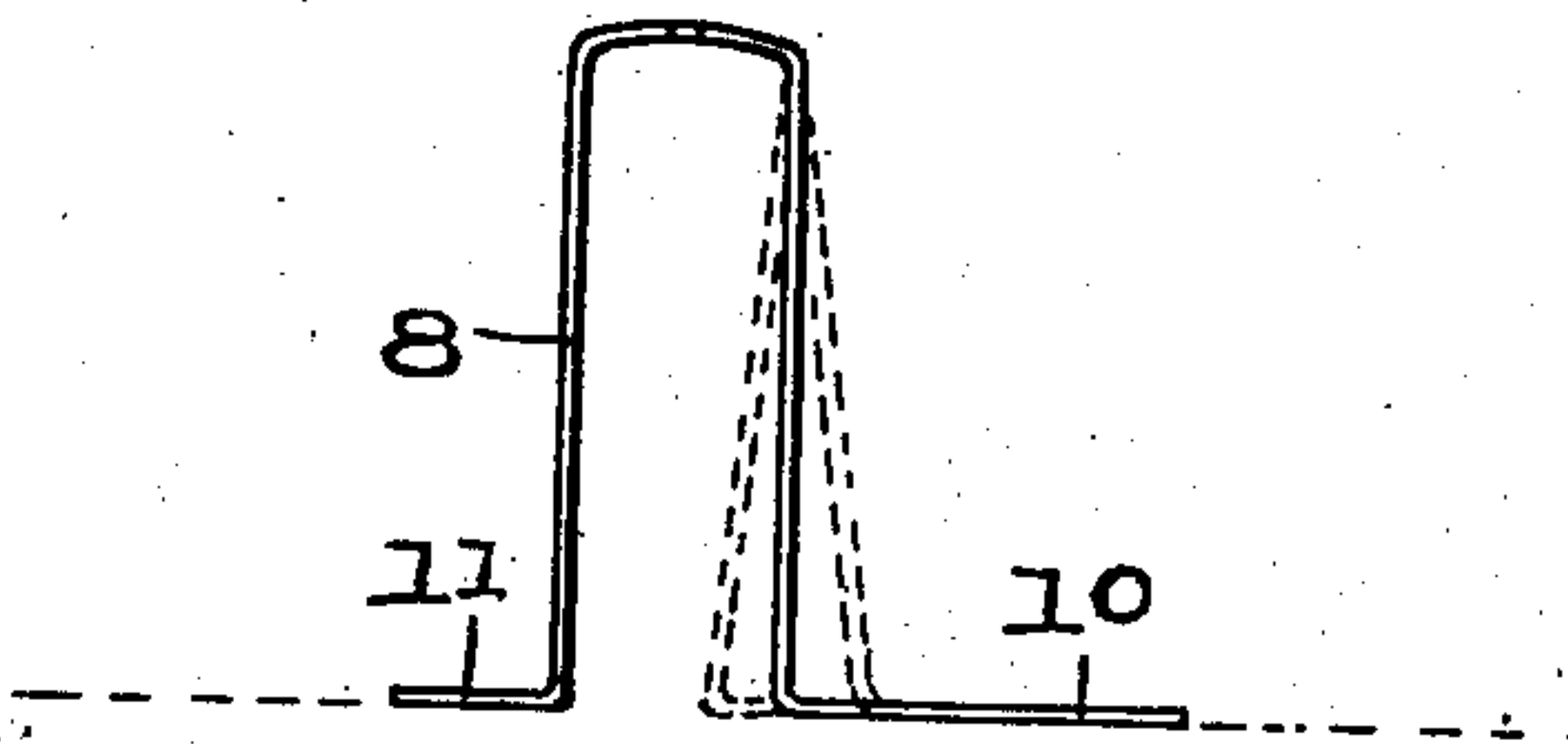
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN DIERDORF, OF INDIANAPOLIS, INDIANA.

## PEDAL-ACTION FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 724,555, dated April 7, 1903.

Application filed March 15, 1902. Serial No. 98,357. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN DIERDORF, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Pedal-Actions for Pianos, of which the following is a specification.

The object of my invention is to provide a new and useful improvement in pedal-actions for pianos, one in which simplicity of construction and durability are the chief features.

The object consists, further, in mounting the beams to which the pedals and damper-rods are connected upon a U-shaped spring, the said spring not only acting as a fulcrum for said beam, but providing the tension under which the beam labors. There are other features, and the arrangement and construction of the several parts will be hereinafter more particularly described and then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof and on which similar numerals of reference indicate similar parts, Figure 1 is a fragmentary detail view of the lower portion of a piano and shows my improved pedal-action in operating position. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of the spring to which the beams are secured; and Fig. 4 is a side elevation of said spring, the dotted lines of this figure showing the adjustability of said spring which increases or decreases the spring's resisting qualities.

In the drawings, 1 represents the piano-frame, which may be of the ordinary construction, only so much of the frame in this instance being shown as is necessary to illustrate my invention therewith.

2 is the floor of the piano-frame; 3, the pedals, which are pivotally secured at the rear ends to the floor 2. The pedals are located, as is well known, central to the piano, and hence are directly in front and within easy access for the operator. Each pedal is provided with a vertical rod 4, which extends upward and connects with a beam 6. The vertical rods 4 carry the nuts 5 on the upper ends, which rest on the beams 6. Mounted

in a horizontal manner and within the piano-body are the beams 6, which beams extend from the center of the piano-frame to the ends thereof. The beams 6 have a slot 14 in the inner ends, through which the rods 4 extend. The outer ends of the beams carry the slots 15, through which the pins 16 extend, which are secured in the ends of the damper-rods 7. The damper-rods 7 are vertically mounted in the ends of the piano-frame and rest on the outer ends of the beams 6. The damper-rods are common in all pianos, and no further mention of them will be made, except that they engage with the damper which regulates and controls the volume of tone produced by the instrument.

The beams 6 are mounted on U-shaped springs 8 by means of the screws 9. The springs 8 have the ends bent at right angles from the main body and form the wings or base 10 and 11. The wings have a longitudinal slot 17 cut therein, by which the springs are secured to the floor 2 by means of the screws 12 and 13. The screw 13 is the first one driven. It will be seen that the wing 10 has a greater length than the wing 11. The extra length of the wing 10 allows for the adjustment of the spring. The various positions obtained for the heel of the spring is shown by dotted lines in Fig. 4. By expanding or contracting the spring I increase or reduce its resiliency. The spring is now held in position, and the screw 12 is driven into the floor 2. The movement of the beams is necessarily of short compass, to which the springs readily adjust themselves.

Having thus fully described my said invention, what I desire to secure by Letters Patent is—

In a pedal-action for pianos, in combination with the main piano-body, pedals pivotally secured to the floor of said body, beams extending from the center to the ends of the piano-frame, slots in the ends of the beams which form bearings for the pedal and damper rods, pedal-rods connecting the pedals with the beams, vertical damper-rods mounted in the ends of the piano-frame which carry pins which engage with the slotted ends of



the beams, U-shaped springs secured to the  
beams by means of screws and the ends of  
which terminate into right-angle wings, slots  
in the wings which receive screws, whereby  
5 the springs are adjusted and secured to the  
piano-frame, substantially as shown and de-  
scribed.

In witness whereof I have hereunto set my  
hand and seal, at Indianapolis, Indiana, this  
20th day of January, A. D. 1902.

JOHN DIERDORF. [L. S.]

Witnesses:

C. C. TOPP,  
F. W. WOERNER.