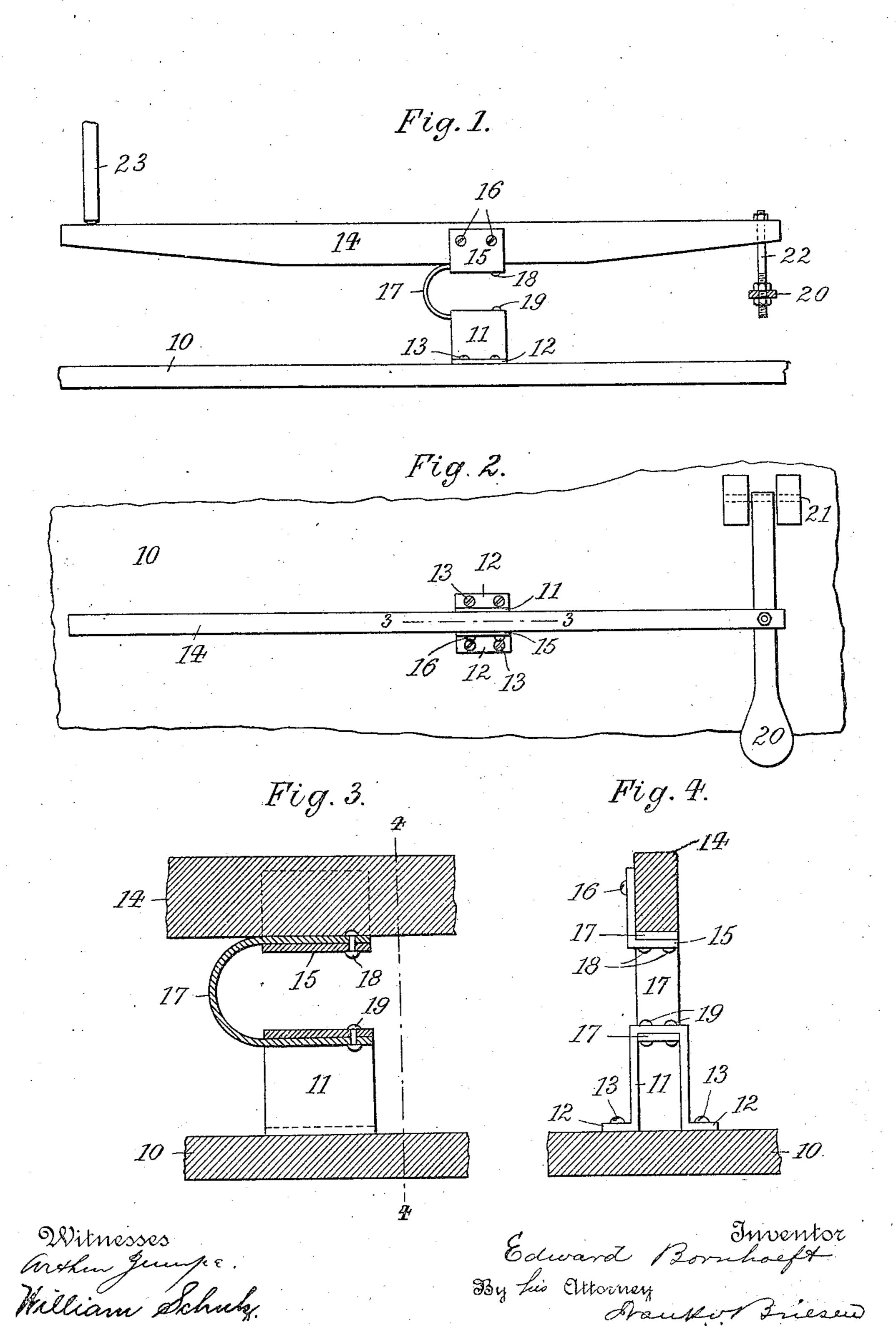
E. BORNHOEFT. PIANO PEDAL ACTION. APPLICATION FILED DEC. 18, 1906.



UNITED STATES PATENT OFFICE.

EDWARD BORNHOEFT, OF NEW YORK, N. Y.

PIANO PEDAL-ACTION.

No. 847,639.

Specification of Letters Patent.

Patented March 19, 1907.

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To all whom it may concern:

Be it known that I, Edward Bornhoeft, a citizen of the United States, residing at New York city, Bronx, county and State of New York, have invented new and useful Improvements in Piano Pedal-Actions, of which the following is a specification.

This invention relates to an improved piano pedal-action, and more particularly to improved means for spring-mounting the

By my invention the spring may be readily inserted and replaced, and the strain to which the spring is subjected during use has not the tendency to loosen its connections or

break it at its points of attachment.

In the accompanying drawing, Figure 1 is a front view of my improved piano pedalaction with the pedal removed; Fig. 2, a plan of the action; Fig. 3, an enlarged longitudinal section on line 3 3, Fig. 2; and Fig. 4, a cross-section on line 4 4, Fig. 3.

From the base 10 of the piano-case projects upwardly an inverted-U-shaped frame 11. This frame has lower horizontal perforated flanges 12 for the reception of screws 13, by which the frame is attached to base 10. In vertical alinement with frame 11 the piano pedal-lever 14 is engaged by an L-30 shaped frame 15, secured thereto by screws 16, that pass through the perforated side of the frame. Frame 15 is so mounted that a low opening or slit is formed between the bottom of lever 14 and the base-plate of the frame.

A U-shaped spring 17, having a pair of normally parallel horizontal shanks, constitutes the fulcrum of lever 14 and at the same time the means for securing such lever to the piano-case. The upper shank of this spring enters frame 15 below lever 14 and is secured at its end to the base-plate or horizontal member of the frame by rivets 18. The lower shank of the spring enters frame 11 be-

low the top plate thereof, to which it is secured at its end by rivets 19. Rivets 18 and 19 are placed near that end of frames 15, 11, respectively, which is opposite to that at which the spring enters such frames. Thus, as shown, while the spring enters the frames 50 at their left end, the rivets are placed near their right end. The result is that the tension to which the spring is subjected during use will not have a tendency to loosen the rivets or break out the rivet-holes.

The pedal-lever 14 is operated by the pedal 20, fulcrumed to base-plate 10 at 21 and engaging a hanger 22, depending from one end of lever 14. The outer end of such lever operatively engages the lifter 23, as usual.

I claim—

1. In a piano pedal-action, a piano-base, an inverted-U-shaped frame mounted thereon, a pedal-lever, a second frame engaging the same and having a horizontal member, 65 and a horizontal U-shaped spring having a lower shank that is secured to the top plate of the U-shaped frame, and an upper shank that is secured to the horizontal member of the second frame, substantially as specified. 70

2. In a piano pedal-action, a piano-base, a first frame mounted thereon and having a top plate, a pedal-lever, a second frame engaging the same and having a horizontal member, a horizontal U-shaped spring hav- 75 ing lower and upper shanks, means for securing the end of the lower shank to the top plate of the first frame, and means for securing the end of the upper shank to the horizontal member of the second frame, substan-80 tially as specified.

Signed by me at New York city, Manhattan, New York, this 17th day of December,

1906.

EDWARD BORNHOEFT.

Witnesses:

William Schulz, Frank v. Briesen