(No Model.) 2 Sheets—Sheet 1.

P. M. ZEIDLER.

FALL BOARD FOR PIANOS.

No. 549,665. Patented Nov. 12, 1895.

Fig. 1.

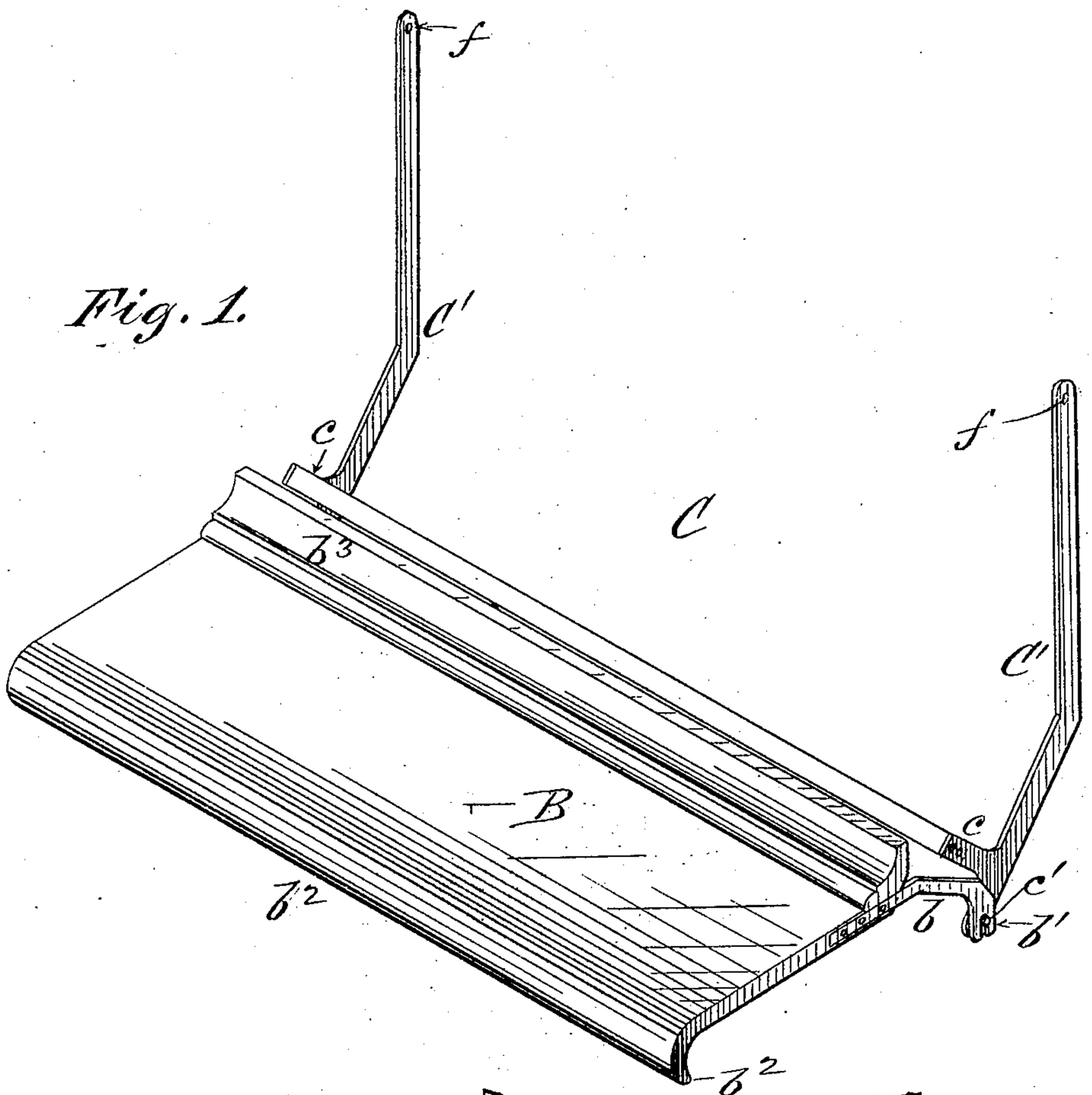
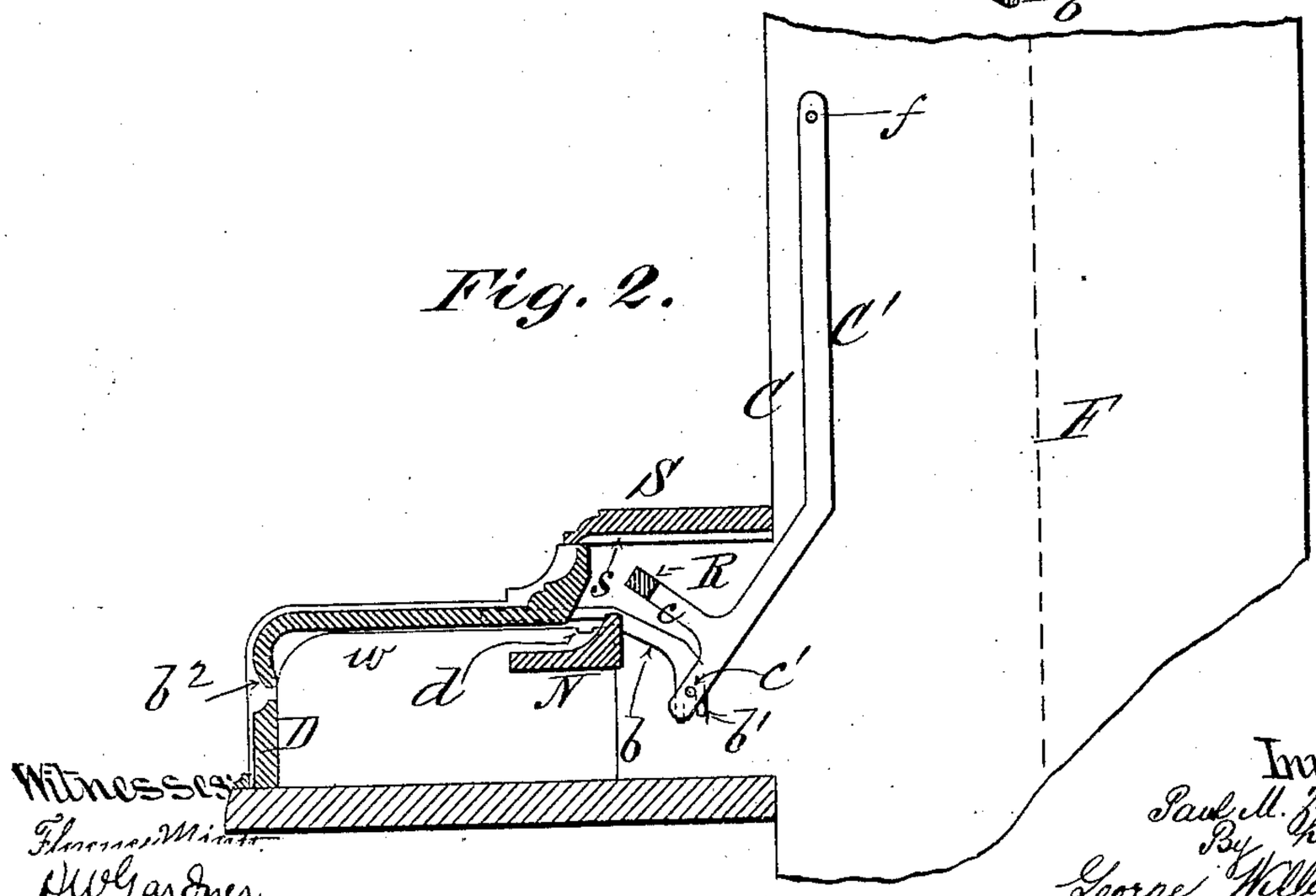


Fig. 2.



Witnesses:
Florence Miatt.
D. W. Gardner

Inventor:
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

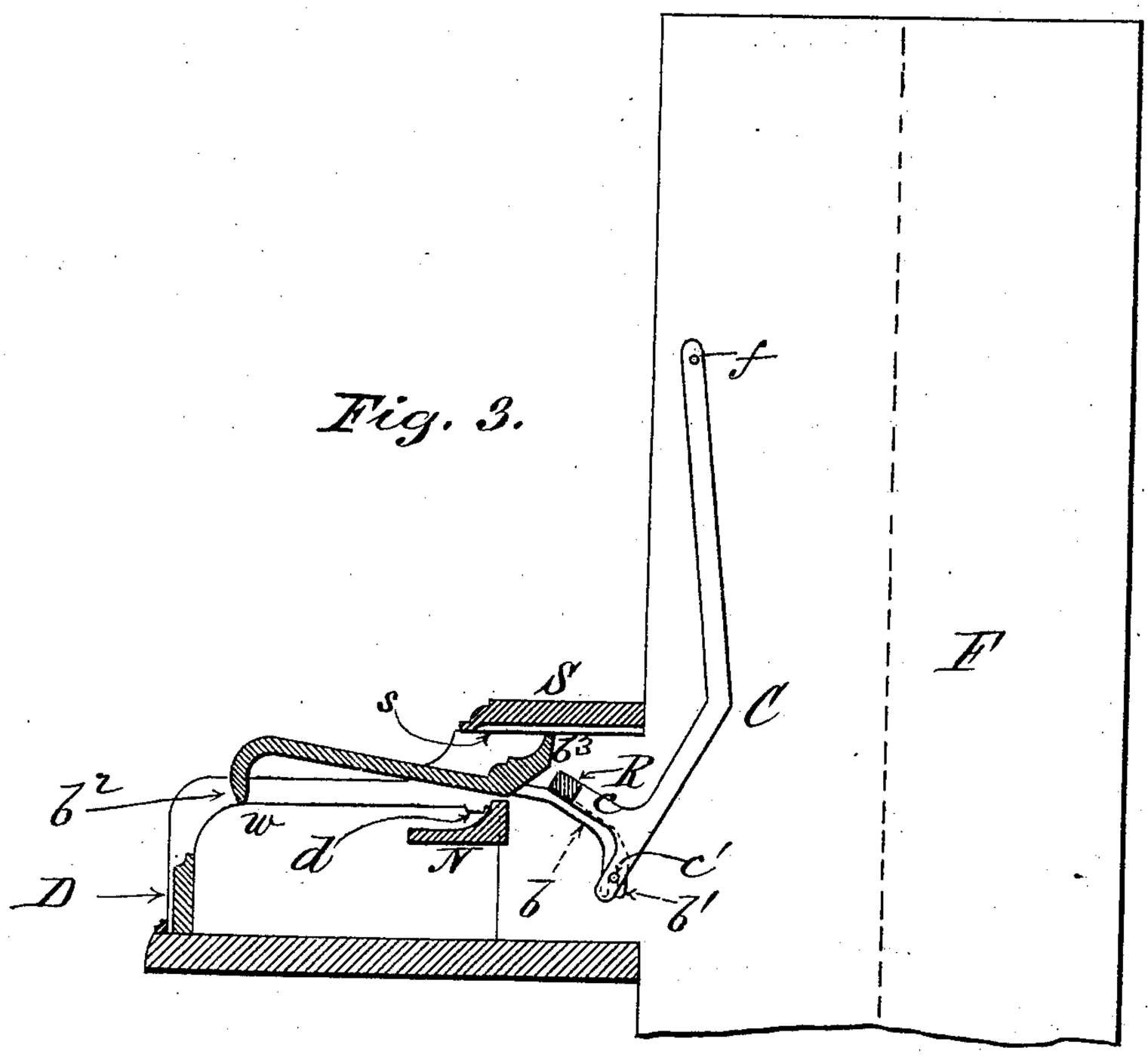
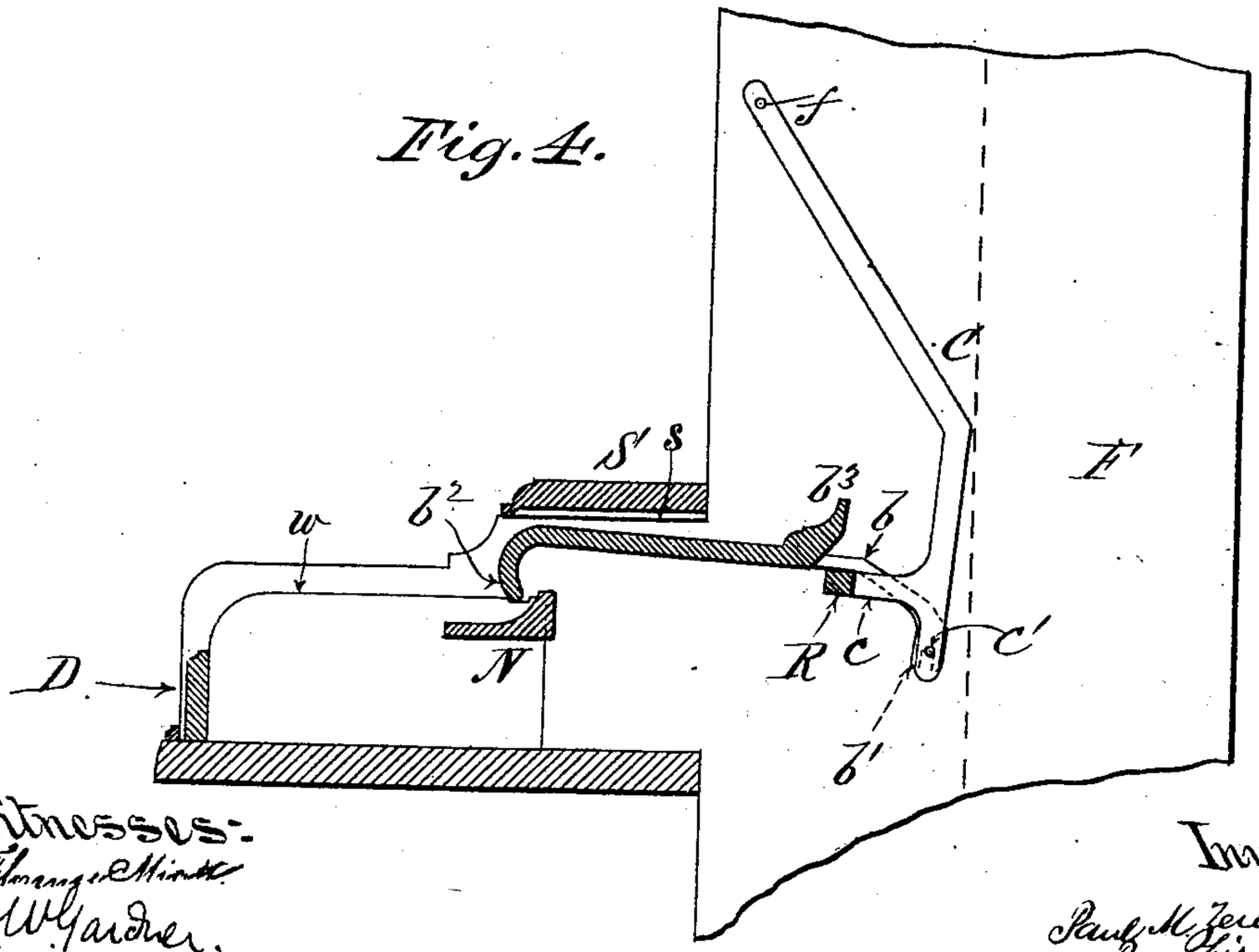


Fig. 4.



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Inventor:
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By George William Miatt

UNITED STATES PATENT OFFICE.

PAUL M. ZEIDLER, OF NEW YORK, N. Y., ASSIGNOR TO STRICH & ZEIDLER, OF SAME PLACE.

FALL-BOARD FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 549,665, dated November 12, 1895.

Application filed June 10, 1895. Serial No. 552,249. (No model.)

To all whom it may concern:

Be it known that I, PAUL M. ZEIDLER, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Fall-Boards for Pianos, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My improvements are designed to obviate the use of hinges, to render the fall easily detachable, to improve the appearance of the instrument when the piano is opened, to afford more room for the fingers of the player, and to attain other incidental advantages of construction and arrangement of parts hereinafter set forth.

My improvements relate to swinging fall-boards for upright pianos, &c., and are designed to effect the swinging of the fall-board in substantially a horizontal plane without interference with the "action" of the piano, at the same time rendering the fall-board easily detachable.

The invention consists in the special construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an isometrical perspective of the fall-board and its carrier. Fig. 2 is a transverse section of a portion of the piano-frame and fall-board, showing one end of the carrier in elevation with the fall-board in its forward position. Fig. 3 is a similar view showing the fall-board partially retracted; Fig. 4, a similar view showing the fall-board wholly retracted.

F represents one side of the case of an upright-piano, between which and the opposite end of the frame (not shown) the carrier C is pivotally supported.

As shown in the drawings, the carrier C consists of two pendulous arms or levers C′ C′, pivotally supported at *f f* to stationary parts of the piano and united by a cross bar or rail R. The rail R extends between the ends of upwardly-inclined arms *c c* of the levers C′ C′, so as not to interfere with the action.

The inner side of the fall-board B is supported on the frame C in any suitable manner, which will admit of free play between them, so that they can adapt themselves relatively to the changes in position occasioned by advancing or retracting the fall-board. Thus, as in the drawings, pins *c′ c′* may be provided on the lower extremities of the rocking arms C′ C′ for engagement with the bifurcated ends *b′ b′* of the arms *b b*, projecting backward from the ends of the fall-board B. By this construction the fall-board B and carrier C may be readily coupled and uncoupled.

The front edge b^2 of the fall-board B at both of its ends rests upon the horizontal guiding and supporting ways *w w*, the front ends of which curve downward to meet the front rail D of the keyboard, while the rear ends terminate in recesses or depressions *d d*, into which the ends of the edge b^2 of the fall-board B drop when the latter is pushed back sufficiently. When in this position, as shown in Fig. 4, the curved front of the fall-board B rests between the upper side of the name-board N and the under side of the shelf S, which latter is hollowed out underneath, as at *s*, to allow the passage of the raised rear end b^3 of the fall-board, as illustrated in Fig. 3.

It will be seen that when the fall-board is pushed back horizontally until the extremities of its front edge rest in the depressions *d d* the only portion thereof visible is the rounded or curved front, which practically closes the space between the name-board N and the front edge of the shelf S, thus attaining a neat and ornamental effect when the piano is open for use, as well as leaving the keyboard free and accessible in front of the front edge of the name-board N. The increase of room for the fingers of the player at the back of the keys is an important advantage, affording greater scope for execution on the part of the player.

The suspension of the rear of the fall-board upon the carriage C reduces the frictional resistance to be overcome in swinging the fall-board in or out to that created by the bearing of the extreme ends of the front edge b^2 upon the horizontal ways *w w*, plus the frictional resistance of the pivotal connections *c′ c′* and *f f*, practically amounting to so little in the aggregate that the fall-board may be advanced or retracted with ease and safety.

The depressions *d d* serve to lock or hold the fall-board in its retracted position, although they are not absolutely essential, since

any tendency to forward swing of the fall-board may be counteracted by other expedients, as by inclining the ways inward and downward.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In an upright piano the combination of a fall board, a carrier pivotally supported on stationary parts of the piano above the plane of the fall board and pivotally connected with the rear end of the latter, and guiding and supporting ways for the front edge of the fall board arranged in conjunction with the pivotal supports of the carriage above in such manner that the fall board may be swung in and out in substantially a horizontal plane substantially in the manner and for the purpose described.

2. In an upright piano the combination of the fall board B, pivotally connected to the carrier C, said carrier C, pivotally supported on stationary parts of the piano above the plane of the fall board, and horizontal ways *w*, *w*, for the front of the fall board formed with the depressions *d*, at the rear for the purpose and substantially in the manner described.

3. In an upright piano the combination of the fall board B, pivotally connected to the carrier C, said carrier C, pivotally supported on stationary parts of the piano above the plane of the fall board, horizontal ways *w*, *w*, for the front of the fall board, and the shelf S, formed with the recess *s*, to accommodate the rear edge of the fall board, substantially in the manner and for the purpose described.

4. In an upright piano the combination of the fall board B, pivotally connected to the carrier C, and said carrier C, consisting of the arms C′, pivotally supported by stationary parts of the machine and connected by the cross rail R, extending between the lateral arms *c*, *c*, so as to avoid interference with the "action" of the piano substantially in the manner described.

5. In an upright piano the combination of the fall board B, having the bifurcated arms *b*, *b*, the swinging carrier C, provided with the pins *c′*, *c′*, for engagement with the bifurcated ends of the fall board arms *b*, *b*, and the ways *w*, *w*, for supporting and guiding the front edge of the fall board, substantially in the manner and for the purpose described.

PAUL M. ZEIDLER.

Witnesses:
GEORGE WILLIAM MIATT,
D. W. GARDNER.