

No. 793,334.

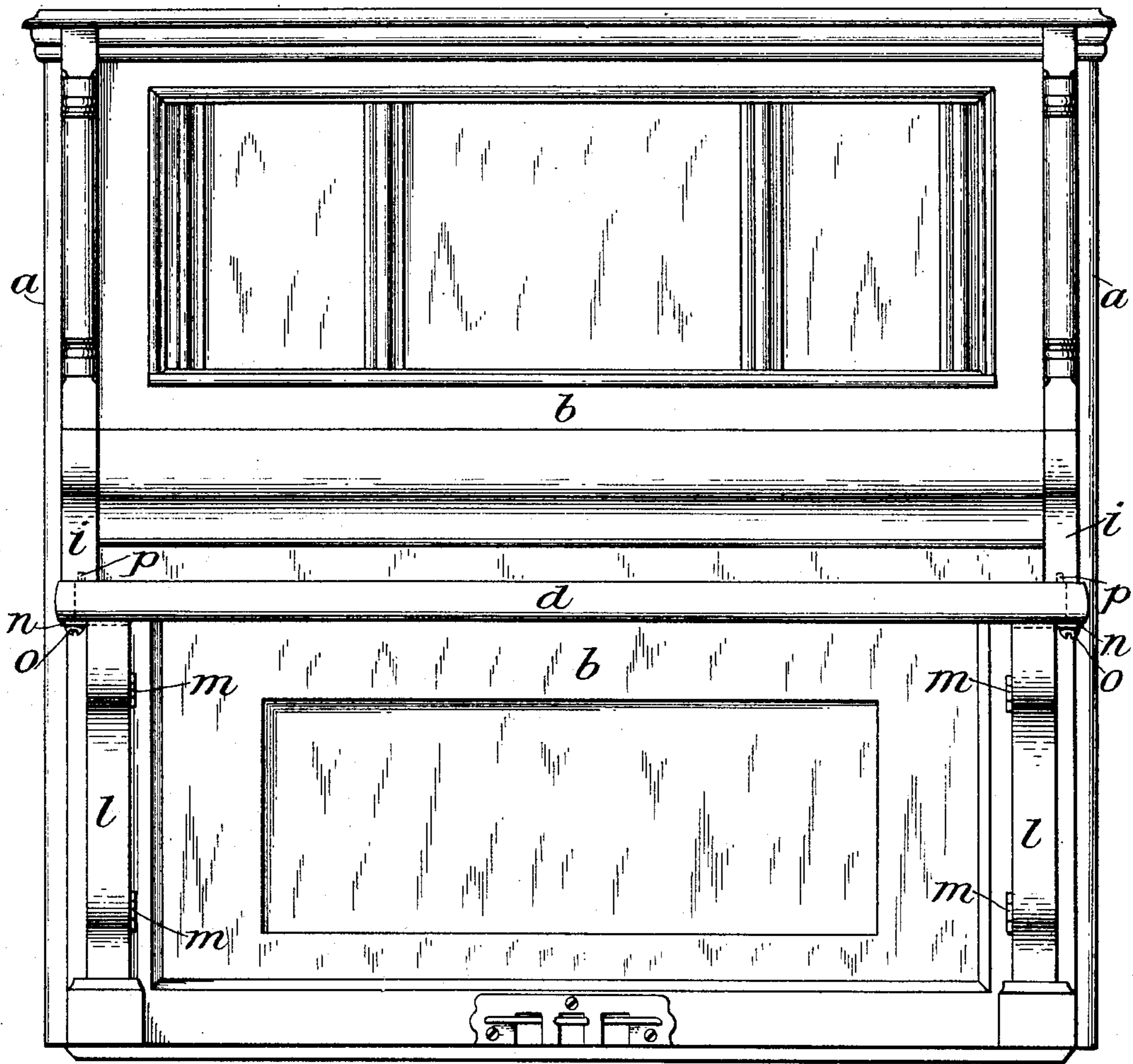
PATENTED JUNE 27, 1905.

J. A. WESER.  
PIANO.

APPLICATION FILED DEC. 7, 1904.

3 SHEETS—SHEET 1.

*Fig. 1.*



Witnesses  
*Edgworth Crane*  
*A. W. Jasbera*

John A. Weser, Inventor  
By his Attorneys  
*Redding, Kiddle & Greeley*

No. 793,334.

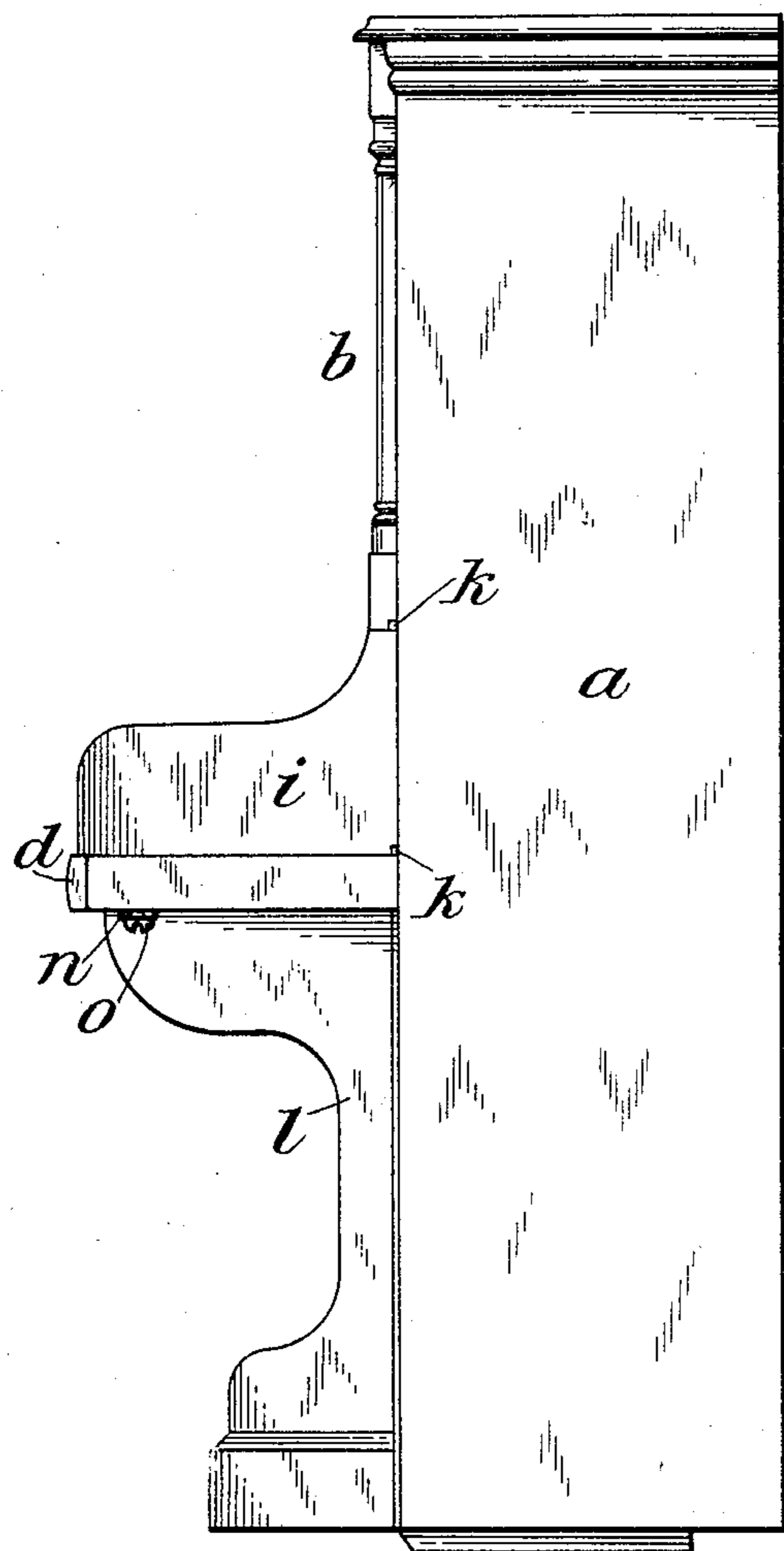
PATENTED JUNE 27, 1905.

J. A. WESER.  
PIANO.

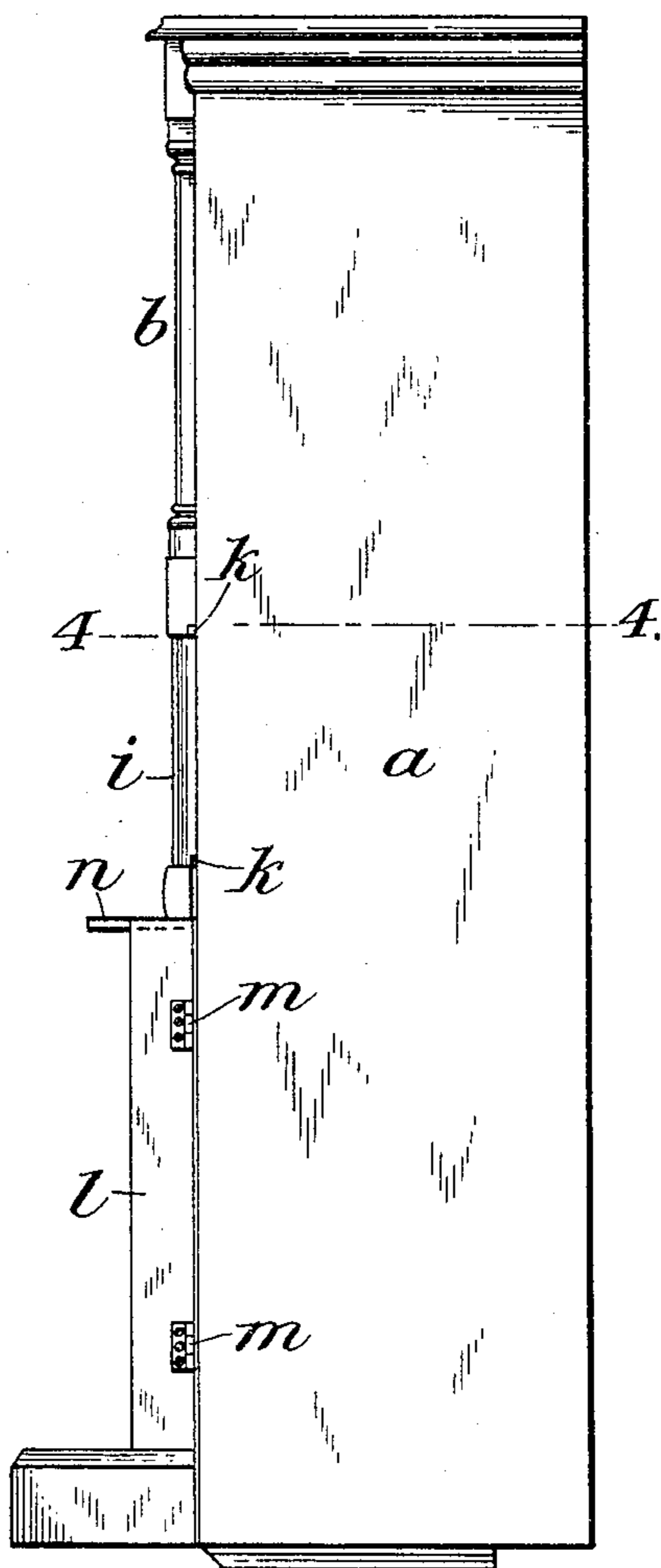
APPLICATION FILED DEC. 7, 1904.

3 SHEETS—SHEET 2.

*Fig. 2.*



*Fig. 3.*



Witnesses  
*Edgeworth*  
*H. K. Jesbera.*

*John A. Weser,* Inventor  
By his Attorneys  
*Kedding Kiddle & Freely.*

No. 793,334.

PATENTED JUNE 27, 1905.

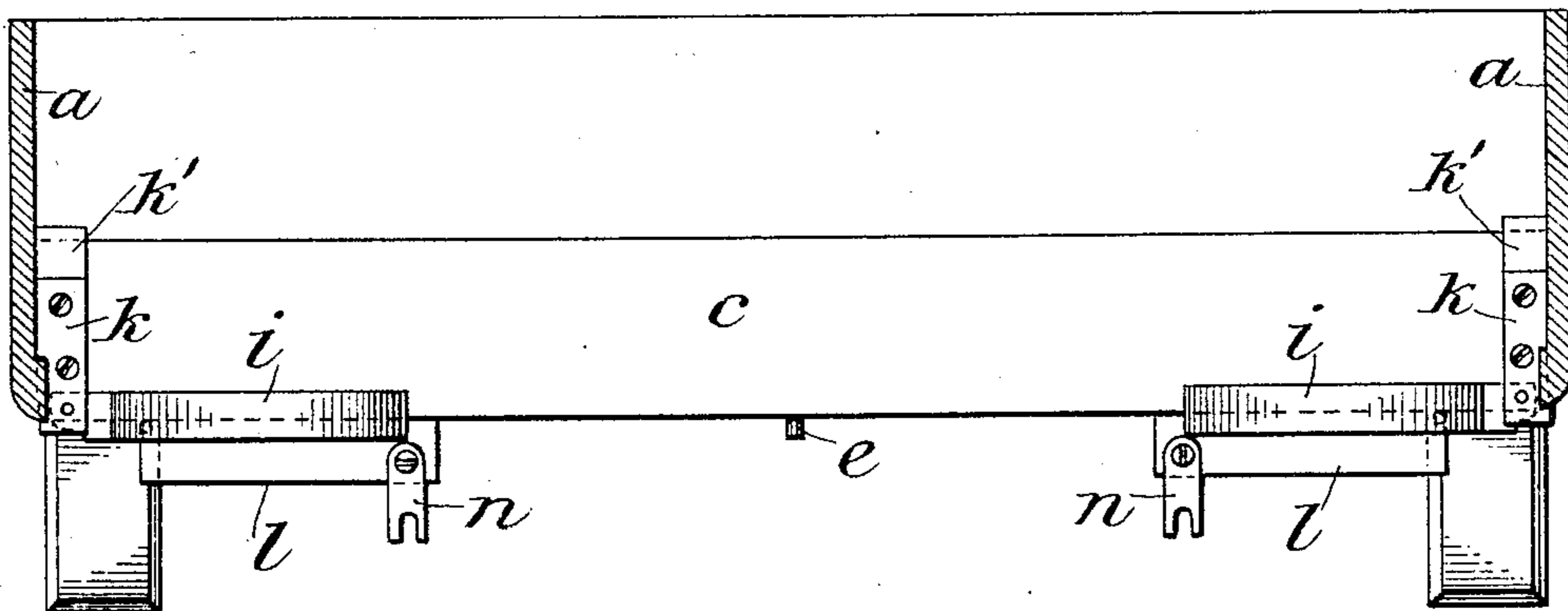
J. A. WESER.

PIANO.

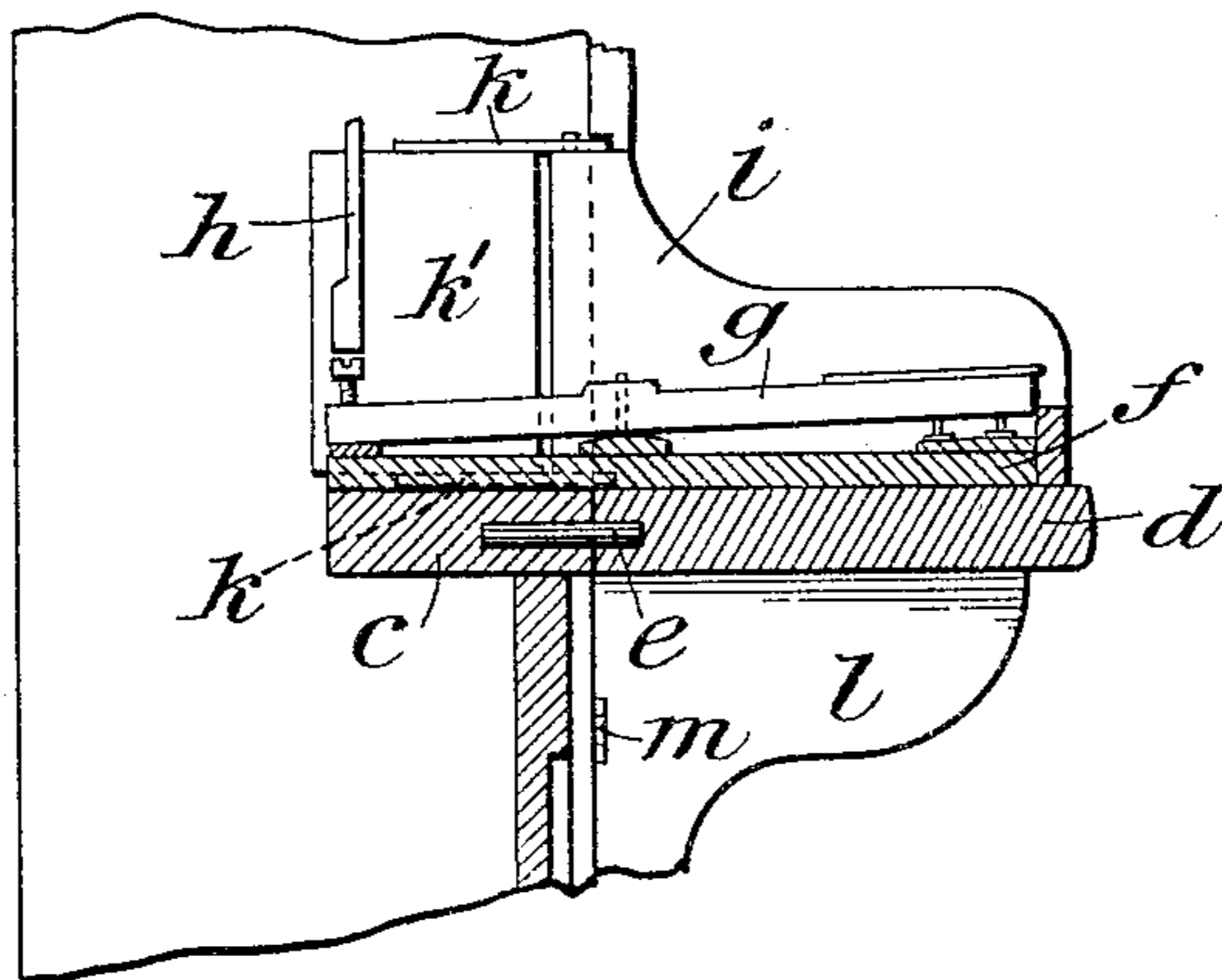
APPLICATION FILED DEC. 7, 1904.

3 SHEETS—SHEET 3.

*Fig. 4.*



*Fig. 5.*



Attest:  
*Edgeworth Burns*  
*A. K. Jesbera.*

Inventor:  
*John A. Weser,*  
by *Redding, Kiddle & Greeley* Attys.

# UNITED STATES PATENT OFFICE.

JOHN A. WESER, OF NEW YORK, N. Y.

## PIANO.

SPECIFICATION forming part of Letters Patent No. 793,334, dated June 27, 1905.

Application filed December 7, 1904. Serial No. 235,789.

*To all whom it may concern:*

Be it known that I, JOHN A. WESER, a citizen of the United States, residing in the borough of Manhattan, in the city of New York, in the State of New York, have invented certain new and useful Improvements in Pianos, &c., of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

10 This invention relates to the construction of pianos of the upright type.

As is well understood by piano manufacturers, it is impracticable to reduce the depth of an upright piano—that is to say, the out-  
15 side dimension of the same in a horizontal line at right angles to the length of the keyboard—within a certain minimum. The arrangement of the piano-keys at right angles to the sounding-board and strings fixes a minimum dimension which cannot be reduced. Nevertheless, this minimum dimension is so great as to frequently create considerable difficulty in placing a piano in a modern apartment-house, where the narrowness of stair-  
25 ways and halls often makes it necessary to introduce a piano through a window. The base of the piano is usually of a depth not too great to permit the handling of the piano under all conditions, and the difficulties alluded to are occasioned chiefly by the depth in the plane of the keyboard. In accordance with the present invention, therefore, the piano is so constructed as to permit the key-frame to be removed, and this is accomplished, as herein-  
35 after explained, without requiring any part of the working action to be disturbed and without requiring any readjustment when the piano is set up. The key-bottom is made in two parts, one being permanently fixed in the piano frame or case, while the other part is readily removable and has the key-frame fast thereto, so that the key-frame can be removed with the removable part of the key-bottom. Such parts of the piano-case as, depending  
45 upon its design, would interfere with the easy handling of the piano under the conditions referred to, such as the arm and the truss or leg, are also made movable, preferably being

hinged, so that they may be laid flat against the body of the piano.

The invention will be more fully explained hereinafter with reference to the accompanying drawings, in which for purposes of illustration and explanation of the nature of the invention it is illustrated as embodied in an upright piano of usual style.

In the drawings, Figure 1 is a view in front elevation of an upright piano constructed in accordance with the invention. Fig. 2 is an end elevation thereof. Fig. 3 is a view similar to Fig. 2, but with the key-frame and key-bottom removed and the arm and truss or leg swung in against the body of the piano. Fig. 4 is a horizontal section on the plane indicated by the line 4 4 of Fig. 3. Fig. 5 is a detail view, in vertical section, through the key-board, key-bottom, and key-frame.

The frame or case of the piano, which may be of any suitable or desired style, comprises, as usual, end members *a a* and a front *b*. The key-bottom, which in ordinary pianos is usually made in one piece, in accordance with the present invention is made in two parts *c* and *d*, the line of division between the two parts being substantially in the plane of the piano-front. The part *c* of the key-bottom is built rigidly and permanently into the piano frame or body. It is desirable that this should be so, because it furnishes an immovable guide in the reassembling of the parts and obviates altogether the necessity for readjustment which would exist if the entire key-bottom were made removable. Suitable dowel-pins *e* serve as means to center the movable part *d* of the key-bottom and to fix it in position. The key-frame *f*, which supports the keys *g*, as usual, is secured rigidly to the movable part *d* of the key-bottom, as by gluing or otherwise, and slips freely over the fixed part *c* of the key-bottom. The inner ends of the keys *g* underlie, as usual, the ends of the abstracts, one of which is shown at *h*, and may be removed together without disturbing the abstracts or any other part of the working action of the piano. The permanence of the fixed part *c* of the key-bottom and the dowel-

pins or other centering devices employed insure the return of the keys to their proper respective positions beneath the abstracts after removal.

5 The arms *i* of the piano frame or case project outwardly, as usual, sufficiently to protect the key-frame and keys, and it is therefore desirable for the general purposes of the invention that they should be capable of being moved to reduce the depth of the piano in their plane. Preferably the arms *i* are hinged or pivoted, so that they may be swung inwardly against the face of the piano, as represented in Fig. 4, and for this purpose they  
10 may be pivoted between plates *k*, secured to the upper and lower sides of a block *k'*, which is secured to the frame. When swung outwardly, the squared inner ends of the arms abut against the side members of the frame, checking the swinging of the arms beyond position at right angles to the front of the piano, in which position the movable part *d* of the key-bottom stands beneath the arms, while the key-frame stands between the arms and  
20 prevents their swinging in. The legs or trusses *l*, which support the weight of the movable part *d* on the key-bottom when the parts are assembled as shown in Figs. 2 and 5, are preferably hinged at their inner edges, as at *m*, so that they may be swung inward upon their hinges against the face of the piano, as shown in Figs. 3 and 4, when the movable part *d* of the key-bottom has been withdrawn. To retain the legs or trusses in  
30 normal position, any convenient stop may be provided. As shown in Figs. 2, 3, and 4, a clip *n* may be secured to the top of each leg or truss near its front edge to slip beneath the head of a corresponding screw *o* in the under side of the removable part *d* of the key-bottom, so that by tightening the screw the leg will be secured in position. At the same time, as will be observed, this device prevents any accidental outward movement  
40 of the movable part *d* of the key-bottom when all the parts have been assembled in operative position.

Short pins *p* in the upper side of the key-bottom *d* enter recesses in the under side of the arms *i*, thereby preventing the accidental displacement of the arms and of the key-bottom when the pins are engaged in the recesses. When the legs or trusses *l* are folded in, the key-bottom drops sufficiently to disengage the  
50 pins from the recesses, thereby permitting the key-bottom to be drawn out.

It will be noted that when the piano is set up, as represented in Figs. 1 and 2, there is nothing in its appearance to distinguish it  
60 from an ordinary upright piano having a permanent one-part key-bottom. When, however, it is desired to move the piano through

a narrow place, the screws *o* are loosened, the legs or trusses *l* are folded in against the face of the piano, the key-bottom and key-frame  
65 are drawn out, and the arms are swung or folded in against the face of the piano. With the width of the piano thus reduced it can be moved through a much narrower place than would be possible otherwise, and when in place  
70 the parts can be immediately reassembled without requiring readjustment of any parts of the working action.

It will be obvious that the arms and legs or trusses might be arranged to be removed altogether, if desired, and that various other modifications in details of construction might be made without departing from the spirit of the invention.

I claim as my invention—

1. In an upright piano, the combination with a longitudinally-divided key-bottom comprising two full-length parts, one of the parts thereof being fixed and the other removable, of a key-frame secured to the movable  
85 part of the divided bottom and removable therewith, substantially as described.

2. In an upright piano, the combination of a removable key-frame and case-arms embracing said key-frame and hinged or pivoted  
90 upon the body of the piano, whereby they may be folded in when the key-frame is removed, substantially as described.

3. In an upright piano, the combination of a longitudinally-divided key-bottom, one part  
95 thereof being fixed and the other part being removable, legs or trusses hinged or pivoted upon the piano-body, and devices engaging said legs or trusses and said key-bottom to prevent accidental movement, substantially  
100 as described.

4. In an upright piano, the combination of a longitudinally-divided key-bottom comprising two full-length parts, one part thereof being fixed and the other part being removable, a key-frame secured to the removable  
105 part, and movable case-arms embracing the key-frame between them, substantially as described.

5. In an upright piano, the combination of  
110 a longitudinally-divided key-bottom, one part thereof being fixed and the other part being removable, a key-frame carried by said removable part, and case-arms pivoted upon the piano-body and embracing the key-frame between them, substantially as described.  
115

6. In an upright piano, the combination of a longitudinally-divided key-bottom comprising two full-length parts, one part thereof being fixed and the other part being removable, a key-frame secured to said removable  
120 part, movable case-arms embracing said key-frame, and movable legs or trusses supporting the key-bottom, substantially as described.

7. In an upright piano, the combination of a removable key-frame, and case-arms hinged to the main frame of the piano, substantially as described.

5 8. An upright piano having its case-arms hinged to the main frame of the piano, substantially as described.

This specification signed and witnessed this 2d day of December, A. D. 1904.

JOHN A. WESER.

In presence of—

JOHN C. GEDDES,  
ALBERT E. HAMELL.