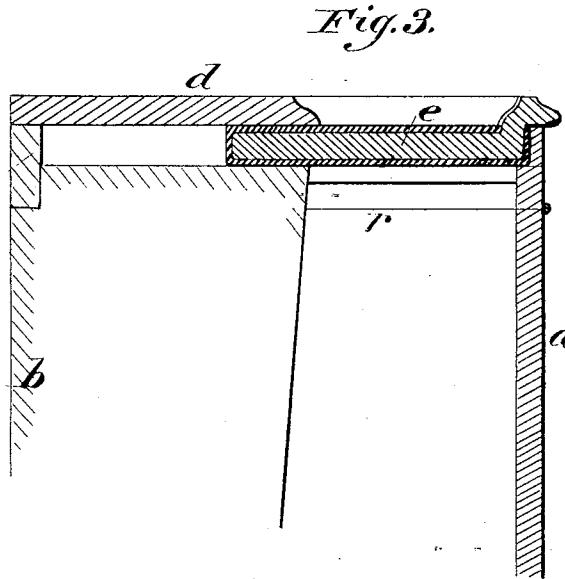
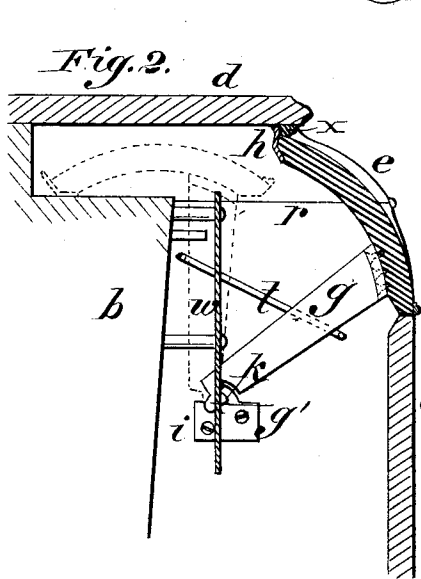
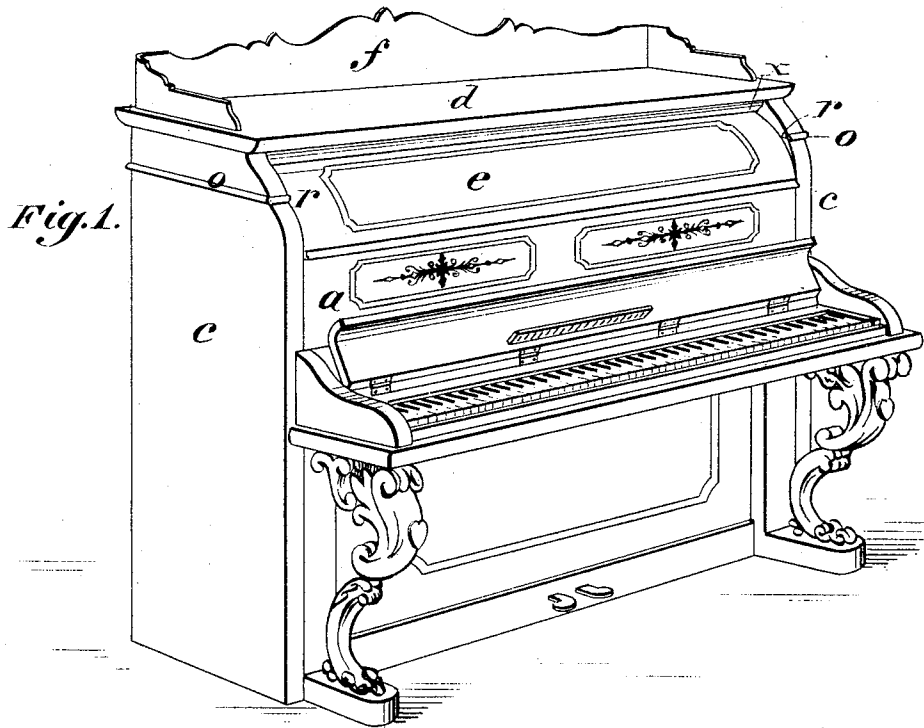


(No Model.)

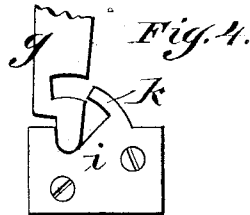
W. A. LORENZ.  
UPRIGHT PIANO CASE.

No. 244,635.

Patented July 19, 1881.



WITNESSES:  
*Donn J. Twitchell.*  
*C. Sedgwick*



INVENTOR:  
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 BY *Mum Co*  
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# UNITED STATES PATENT OFFICE.

WILLIAM A. LORENZ, OF BROOKLYN, ASSIGNOR TO HENRY BEHR & BROTHER, OF NEW YORK, N. Y.; SAID BEHR & BROTHER ASSIGNORS OF ONE-HALF TO SAID LORENZ.

## UPRIGHT-PIANO CASE.

SPECIFICATION forming part of Letters Patent No. 244,635, dated July 19, 1881.

Application filed December 10, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. LORENZ, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Upright-Piano Cases, of which the following is a specification.

Cases for upright pianos are constructed with hinged tops made in one piece that can be opened to swell the volume of sound, such provision being essential in that class of pianos. The raising of the cover, when the instrument is employed, prevents the use of the piano-tops for holding books, sheet-music, or ornaments, and the top, when made in two portions hinged together to allow of the front portion being opened and supported on prop-sticks, is not adapted to hold sheet-music, and when the front half is turned fully over upon the rear it necessitates the removal of everything that may be on top.

The object of my improvement is to utilize the tops of upright-piano cases for holding books, sheet-music, &c., by making it possible to open a cover or lid for the purpose of increasing the volume of sound without disturbing the top.

For the purposes named I provide upright-piano cases with a movable frame or division in the upper part of the case, which division is wholly in the front or in the top, or forms a portion of the front and top. Preferably the movable panel is made as a curved segment, hung to swing on centers; but it may be made to slide.

In the accompanying drawings, Figure 1 is a perspective view of an upright-piano case embodying my invention. Fig. 2 is a vertical transverse section of such case; and Fig. 3 is a transverse section, showing a modification in construction.

Similar letters of reference indicate corresponding parts.

*a* is the front, *b* the back, *c c* the sides, and *d* the top of the upper portion, of an upright-piano case, which parts are of usual construction, except in the particulars hereinafter named.

*e*, in all the figures, is the moving panel or

division, which may be opened to increase the volume of sound.

The top *d* may be hinged to the back *b* or made fast, as desired, and may be extended more or less at the front, according to the style of moving panel *e* that is used. The top may also be provided with an ornamental rail, as shown at *f* in Fig. 1, and, with or without the rail, is adapted for holding sheet-music, books, ornaments, and other articles, as desired.

In Figs. 1 and 2 the moving panel *e* is made in the form of a segment of a cylinder (the curve varying according to the style wanted) attached to the ends of arms *g*, which are pivoted at *g'* to the sides *c* of the case. The segment *e*, when closed, rests upon the upper edge of the front *a*, which is made as much below the top *d* as there is opening required in the case, and the upper edge of the segment extends to a molding, *x*, or nearly in contact with the under side of top *d*, as preferred, being covered, in the latter case, with felt, as shown at *h*, to make a tight joint. In opening the panel it is swung back until its upper edge rests on the back *b*, placing the arms *g* nearly vertical. The panel will then be kept open by gravity. The molding serves as a handle to close the panel. The arms *g* bear against wire staples *t*, driven into the sides *c*, to prevent the sides *c* of the case from being scratched. Guards of suitable material may also be provided at the pivot *g'* for the same purpose, and when the pivots are simply screws washers will answer. This panel, when used with the over-reaching top, whether curved or straight, may be hinged by its upper edge to the back *b*, or to the under side of top *d*, but is not shown in drawings, so as to swing upward or inward in opening, when a prop-stick is provided to retain the panel open. The hinged panel, when curved, will give somewhat the same appearance to the case as shown in Fig. 1.

In Fig. 3 the panel *e* is shown as fitted to slide beneath the top *d* in grooves formed in the sides *c*, and the top is cut out at the front to form an opening, which is closed by panel *e* when drawn out. A sunken panel is thus formed in the top, which can be moved back

to give the required opening. The required opening may also be made in the front *a*, and the panel fitted to slide vertically. When slides are employed it is advisable to cover the  
 5 slide-bearing surfaces with soft material, to prevent rattling. A vertically-sliding panel may be upheld by catches, and handles may be provided for pressing it downward on releasing the catches.

10 Objections may be raised to pianos arranged as described that the display of the pins, strings, &c., presents an unsightly appearance. To remove this objection I secure a piece of fret-work, board, or curtain, *w*, to the  
 15 back *b* by suitable fastenings, thus presenting an unbroken appearance on opening panel *e*. The top *d* is arranged so that it can be lifted, being separated from the body of the case at  
 20 *r*, and a molding, *o*, around the top holds it in place, or the top may be doweled to place.

The panel *e* may be taken out by removing the pivot-screws, if such are employed, or a pivot may be used, as shown in Figs. 2 and 4. Here lock-plates *i* engage in the arm *g* by hooks

25 *k* when panel *e* is closed; but when the panel is fully open the arms *g* are released, and the panel can be taken out when the top *d* is removed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent— 30

1. In an upright-piano-frame case, the movable panel *e*, in combination with the arms *g* and hook-plates *i*, as and for the purpose specified.

2. A piano-case having an opening between 35 the upper edge of the front *a* and the front edge of the top *d*, in combination with the movable panel *e*, arranged and adapted to operate as specified.

3. In an upright-piano case, the curved seg- 40 mental portion *e* and pivoted arms *g*, combined with top *d*, front *a*, sides *c*, and back *b*, substantially in the manner and for the purposes specified.

WILLIAM A. LORENZ.

Witnesses:

GEO. D. WALKER,  
 C. SEDGWICK.