## F. BARNES. FOLDING PIANO BOX.

(Application filed Sept. 11, 1901.)

(No Model.) Mitnesses: Inventor F.Baznes.

## United States Patent Office.

FRANK BARNES, OF WILKINSBURG, PENNSYLVANIA.

## FOLDING PIANO-BOX.

SPECIFICATION forming part of Letters Patent No. 688,578, dated December 10, 1901.

Application filed September 11, 1901. Serial No. 75,013. (No model.)

To all whom it may concern:

Be it known that I, Frank Barnes, a citizen of the United States of America, residing at Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Folding Piano-Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in folding piano-boxes, and has for its object the provision of novel means whereby a piano-box may be easily set up and knocked down when desired; furthermore, to provide novel means that will permit a piano-box to be compactly folded for the purpose of returning the same to the factory or for storing the case in a comparatively small space.

Another object of the present invention is to construct a piano-box of the above-described character that will be extremely simple in construction, strong, durable, and comparatively inexpensive to manufacture; furthermore, one that will be highly efficient in its use.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts, to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views, and in which—

Figure 1 is an end elevation of my improved piano-box. Fig. 2 is a similar view of the same when in a folded or knocked-down position. Fig. 3 is a vertical sectional view of the lower portion of the box, taken on the line 3 3 of Fig. 1 of the drawings. Fig. 4 is a longitudinal sectional view showing a portion of the box taken on the line 4 4 of Fig. 1. Fig. 5 is a rear elevation of the piano-box. Fig. 6 is a perspective view of a portion of the bottom of the piano-box. Fig. 7 is a perspective view of one end of the piano-box. Fig. 8 is a similar view showing a portion of the under face of the folded side of the piano-box.

In the drawings the reference-numeral 1 indicates the back of the piano-box, having strengthening-ribs 2' secured thereon, in 55 which is formed an opening 3 to receive fastening means that will engage the rear portion of the piano with the box or casing. To the rear side of the piano-box are hinged sides 2, which are hinged at 3 to the rear por- 60 tion 1. The lower ends of said hinged sides 2 carry a metallic strip 4, forming a slight recess 5 between the upper face of said metallic strip and the bottom of the sides 2. The said recess is adapted to receive an inwardly-ex- 65 tending flange 6 of the metallic strip 7, which is secured to the bottom 8 of the piano-box. In the engaging faces 9 of the sides 2 is formed a recess 10, which extends in the engaging faces of the top and sides of the sides 2 and is 70 adapted to receive the flanges 11 of the channel-strips 12, secured upon the inner face of the folding front section 14, which is hinged at 15 to the bottom 8, said section being hinged at 16 to the front section 17, which likewise 75 carries channel-strips 12. The said front section 17 is hinged at 18 to the top 19, and the reference-numeral 20 indicates a clasp and staple, forming the well-known fastening means for the purpose of locking the box. 80 The reference-numeral 21 indicates a hinge connection between the bottom and the rear side of the box.

The manner of folding my improved pianobox is as follows: The sides 2 are folded in- 85 wardly against the rear portion of the box, and the bottom is then folded up against the rear sides, the side 14 extending upwardly slightly upon the top of the side, and side 17 and top 19 will assume the position as shown 90 in Fig. 2 of the drawings. It will be noted that when in this folded position the pianobox will form a compact package, which may be easily shipped or stored away. By reason of the channels and grooves a tight joint is 95 formed between the sides, front, and top of the piano-box, while the engaging flanges of the bottom seating themselves in the grooves formed in the side pieces will assure a perfect joint between the sides and bottom of the pi- 100 ano-box.

The many advantages obtained by the use of my improved box will be readily apparent from the foregoing description, taken in con-

nection with the accompanying drawings, and it will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. In a piano-box, the combination of a rear side, side pieces hinged thereto, a bottom hinged to said side pieces, a front piece formed of two sections, a top hinged to the upper of said sections, said side pieces having grooves formed therein, channel-strips carried by said sections of the front pieces and engaging in said grooves, and interlocking plates secured to the sides and bottom, substantially as described.

2. In a piano-box, the combination of a rear

side, side pieces hinged thereto, a bottom 20 hinged to the said side pieces, a front piece formed of two sections and hinged to said bottom, a top hinged to said front piece, said side pieces having grooves formed therein, U-shaped channel-strips carried by the said 25 front piece and engaging said side pieces, a plate carried by said side pieces with a space between the lower end of said side pieces and the plate, a metallic strip carried by said bottom and having an inwardly-extending flange 30 engaging said plate in said space, substantially as described.

In testimony whereof I affix my signature

in the presence of two witnesses.

FRANK BARNES.

Witnesses:

JOHN NOLAND, E. E. POTTER.