

(Model.)

D. HESS.
Violin Case or Box.

No. 232,182..

Patented Sept. 14, 1880.

Fig. 1.

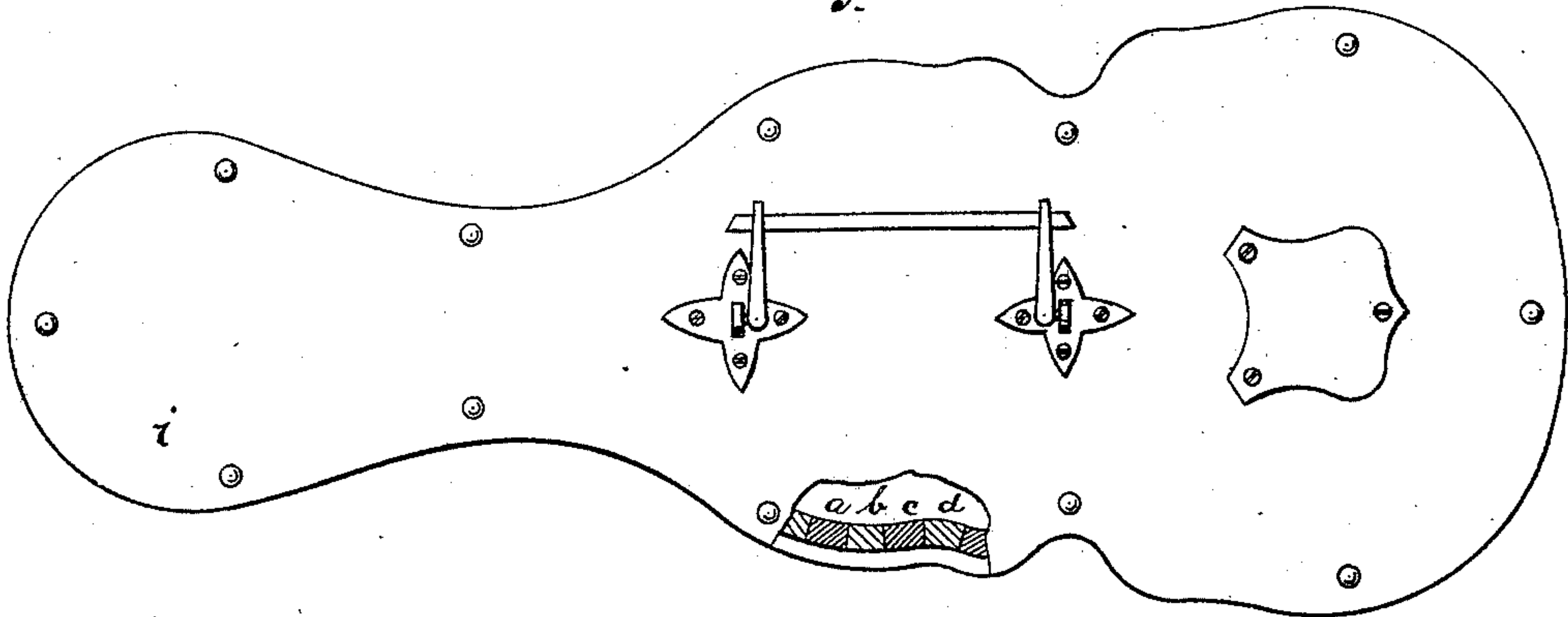


Fig. 2.

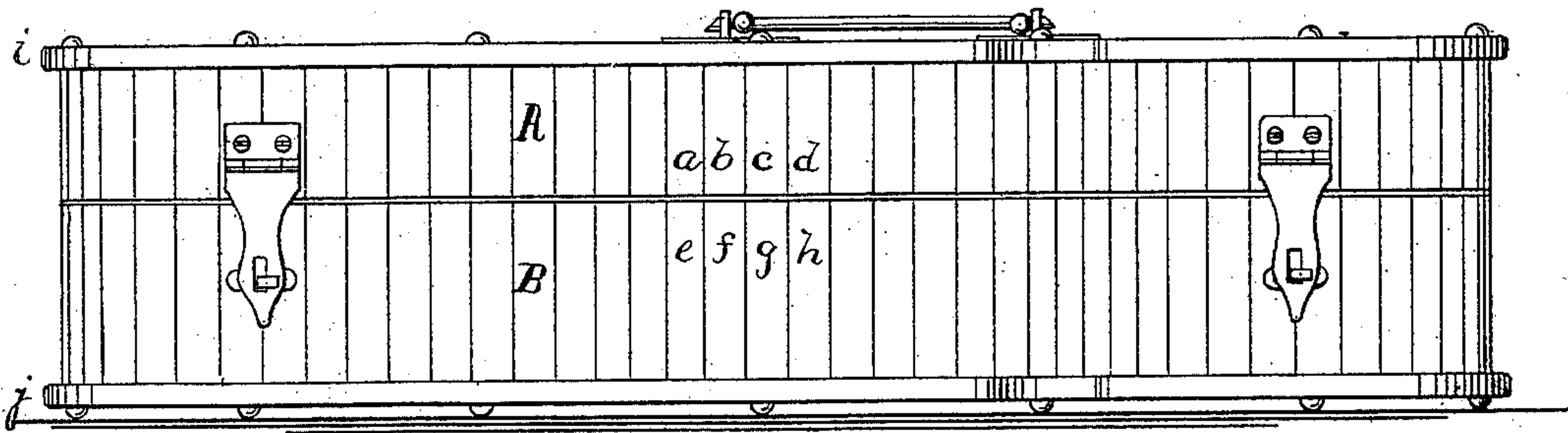


Fig. 4.

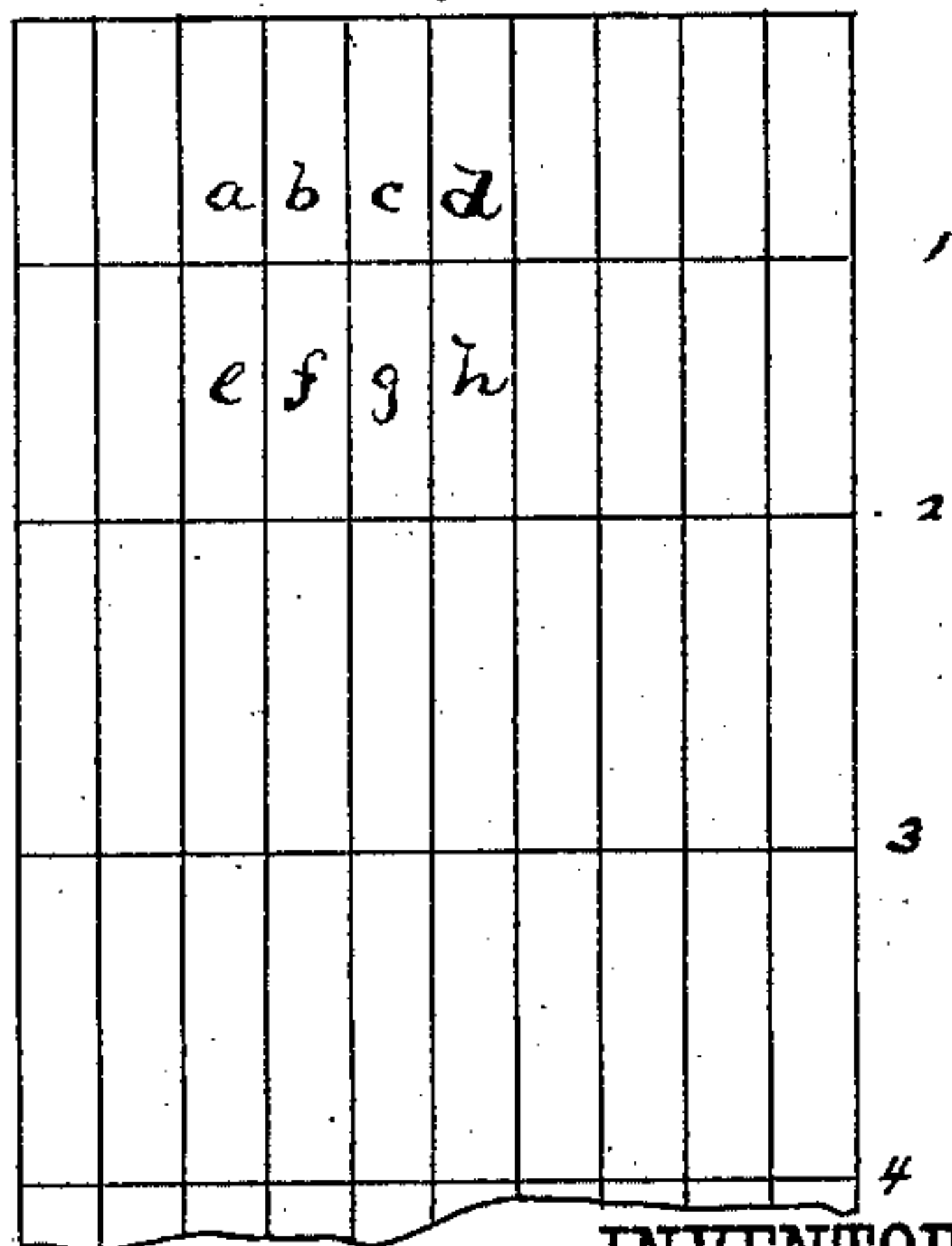
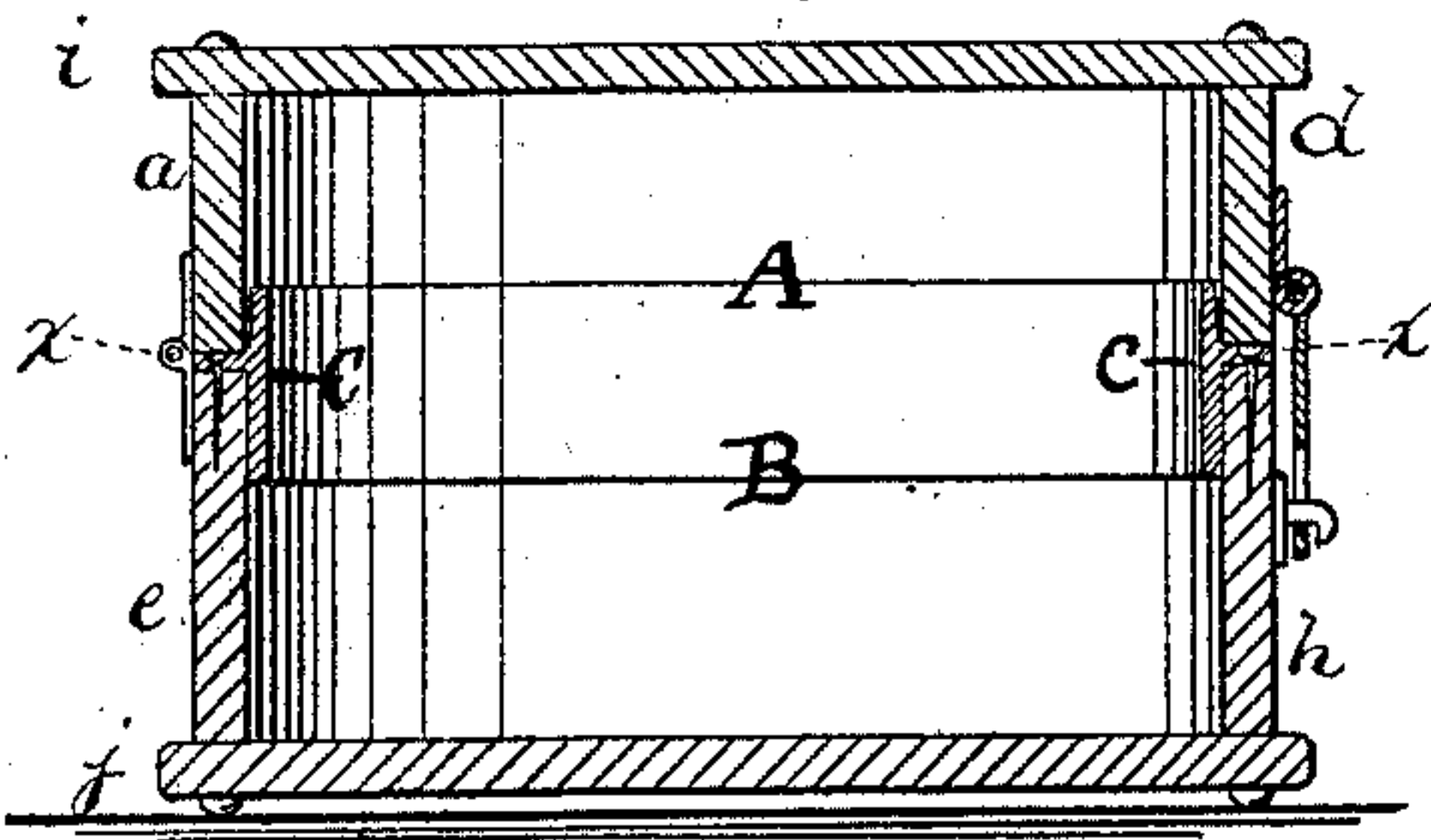


Fig. 3.



WITNESSES:

John C. Postelmann.
Thomas Fenton Taylor.

INVENTOR:

BY *David Hess*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

DANIEL HESS, OF NEWTOWN, NEW YORK.

VIOLIN CASE OR BOX.

SPECIFICATION forming part of Letters Patent No. 232,182, dated September 14, 1880.

Application filed May 11, 1880. (Model.)

To all whom it may concern:

Be it known that I, DANIEL HESS, of Newtown, in the county of Queens and State of New York, have invented a new and Improved Violin-Box, of which the following is a specification.

Heretofore violin-boxes have been made with their sides formed of pieces of wood laid horizontally and bent to form the rounded box sides, and the lid and bottom were then fastened upon these sides. The strain caused by bending these horizontal pieces and the subsequent warping tended to open the seams and separate the pieces. It has also heretofore been almost impossible to make the top of the violin-case conform precisely to the shape of the body on account of the difficulty of suitably bending the sides. Another fault with the old style of case has been that the lid became loose, and that dust and moisture readily penetrated into the interior.

My invention obviates these objections and produces a violin-case whose sides may be made in any suitable shape, and are not likely to warp or crack, and which is well adapted to shut out dust and moisture.

Another advantage of my invention is that by it violin and analogous boxes or cases may be manufactured more rapidly and cheaply than by any of the methods now in use.

I attain many of these advantages by using strips of wood set vertically alongside one another to form the side of the violin-box, as hereinafter described.

The invention is applicable to all boxes or cases other than violin-boxes.

In the drawings, Figure 1 is a top view of my improved violin-box with the material of the top or cover shown partly cut away to give a sectional top view of the side of the box, and showing at *a*, *b*, *c*, and *d* the tops of the vertical side pieces.

Fig. 2 is a side view of the box. *A* is the lid thereof, shutting down on the body *B*. *a b c d* are vertical strips forming the sides of the lid *A*, which close against the corresponding vertical strips *e f g h*, forming the sides of the body *B*, each upper strip being of the same width as and lying in the same vertical plane with its corresponding lower strip when the box is closed.

Fig. 3 is a vertical cross-section of the violin-case. *C* is an inner band or ring of metal or suitable material, running around the interior of the case at the point where the lid *A* and the body *B* come together when the case is closed. This band or rim *C* is fastened to the body *B*, having a flange, *x*, that rests upon the body, and is nailed thereto, as shown, so that the lid *A* shuts down upon the flange *x* and partly embraces the band *C*, which thus aids in excluding dust and moisture that might otherwise pass through the crevice between *A* and *B*, and also acts to strengthen the body *B* and hold the strips of which it is composed in place.

Fig. 4 is a detached view, showing the vertical strips out of which the sides of the violin-box and of its lid are made. These strips are fastened together side by side around a mold having the desired shape, as that of the sides of the violin-box in Fig. 2. The mold is then removed, leaving the vertical walls, which are then sawed through horizontally into suitable heights, as *A* and *B*, to form the vertical sides of the lid and those of the body of the box.

By using strips of a length equal to the height of several desired boxes and joining them around a mold, as above described, I can then saw off numerous sections horizontally, as at the points 1, 2, 3, and 4 in Fig. 4, thus obtaining the vertical sides for several box-lids and bottoms of a desired shape at one time and in a very simple manner, and insuring absolute correspondence of shape of body and lid. The lid is completed by fastening a top, *i*, of suitable shape upon the top of one of the vertical sides, such as *A*, and the body is completed by fastening a suitable bottom, *j*, upon another vertical side, such as *B*. The lid and body are then suitably hinged together to complete the box.

The process of manufacture above described may be applied to boxes of any kind, and is not confined to violin-cases.

I claim—

1. The process herein described of constructing the sides of boxes and of their lids or covers, which process consists in fastening strips of wood or other suitable material together vertically side by side, and then sawing or cut-

ting the connected strips to form the sides of the boxes and their covers, so that the sides of the box-lid and box-body are formed of the same strips, substantially as herein shown and 5 described.

2. As a new article of manufacture, a violin box and cover the sides of which are formed of strips fastened together vertically side by side, those of the cover being, respectively, in 10 line with those of the body of the box, substantially as herein shown and described.

3. The process of manufacturing violin-boxes which consists in setting strips of wood vertically around the outside of a frame or 15 mold and fastening these strips together side by side, in then removing the mold, cutting horizontally through the strips to obtain sec-

tions of suitable height, fastening a top and bottom piece on separate sections to form a lid and a body, and suitably uniting the lid and 20 body, all substantially as herein shown and described.

4. In a violin-box, the interior metal band, C, having flange *x* fastened upon the inside of the rim of the box-body, so as to project above 25 it, and running internally around the circumference of the body and lid, substantially as and for the purposes herein shown and described.

DANIEL HESS.

Witnesses:

JOHN C. BOSTELMANN,
THOMAS FENTON TAYLOR.