

No. 711,564.

Patented Oct. 21, 1902.

L. GASSARD.
WREST PLANK.

(Application filed Jan. 11, 1902.)

(No Model.)

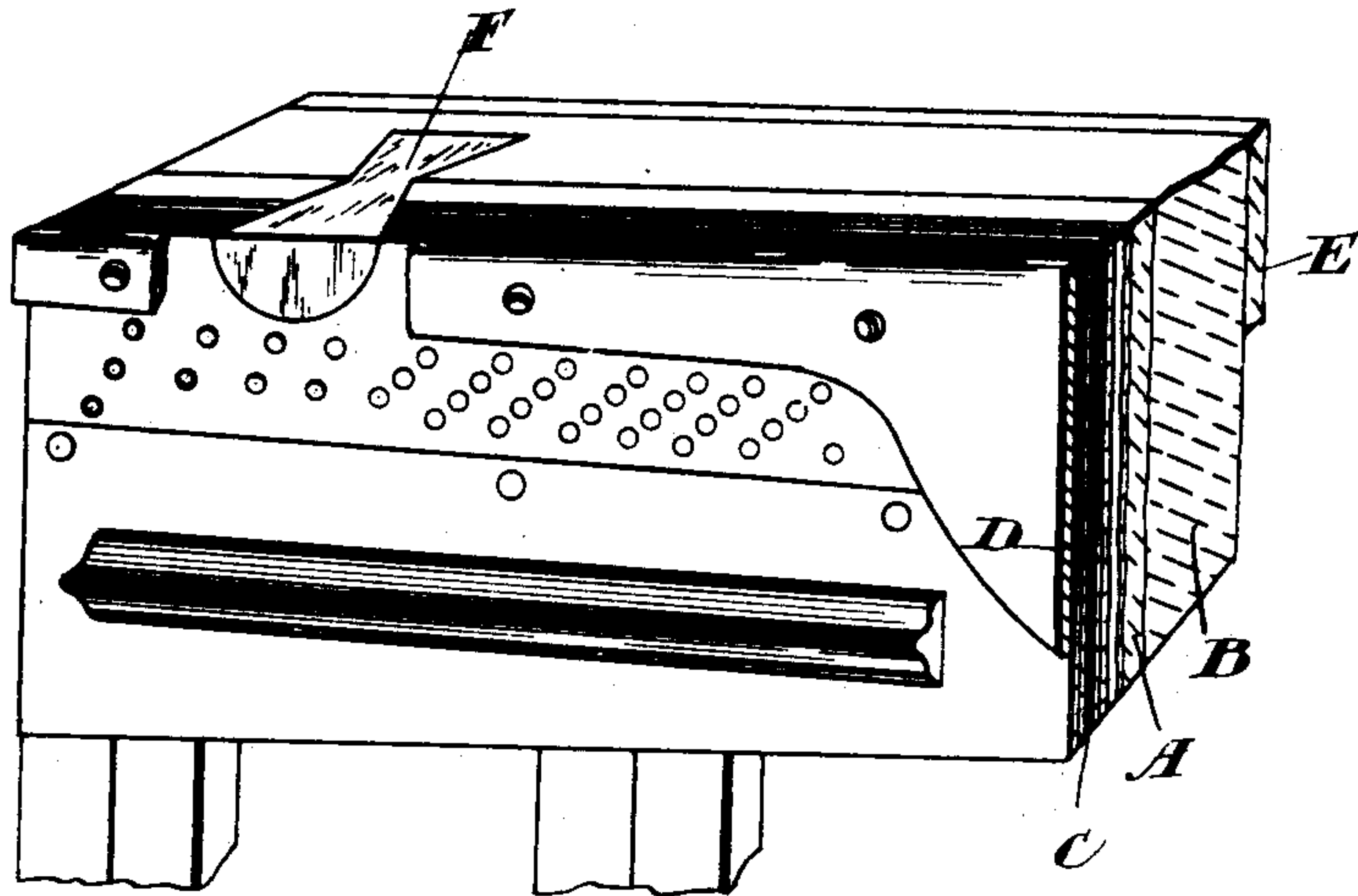


Fig. 1.

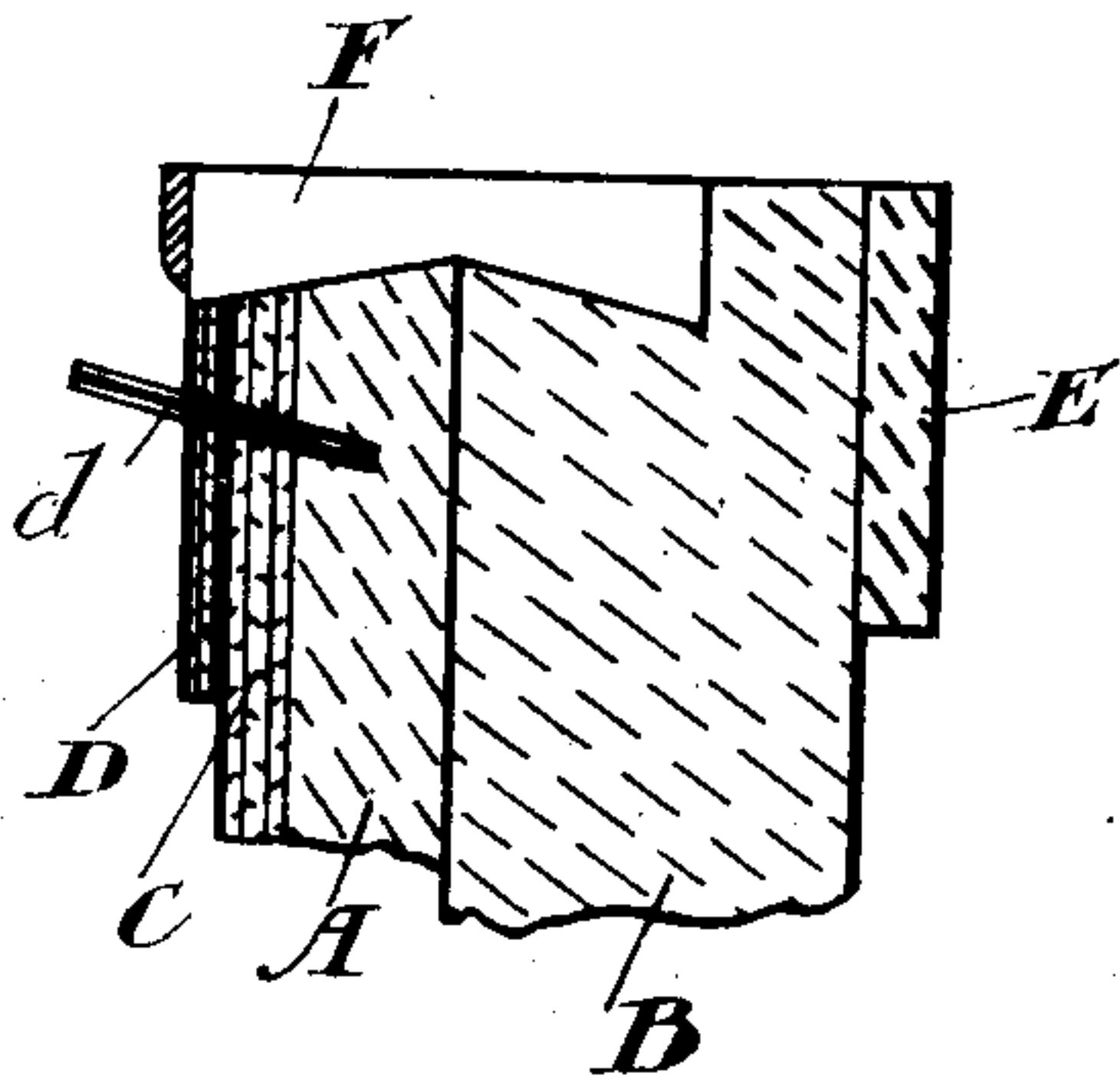


Fig. 2.

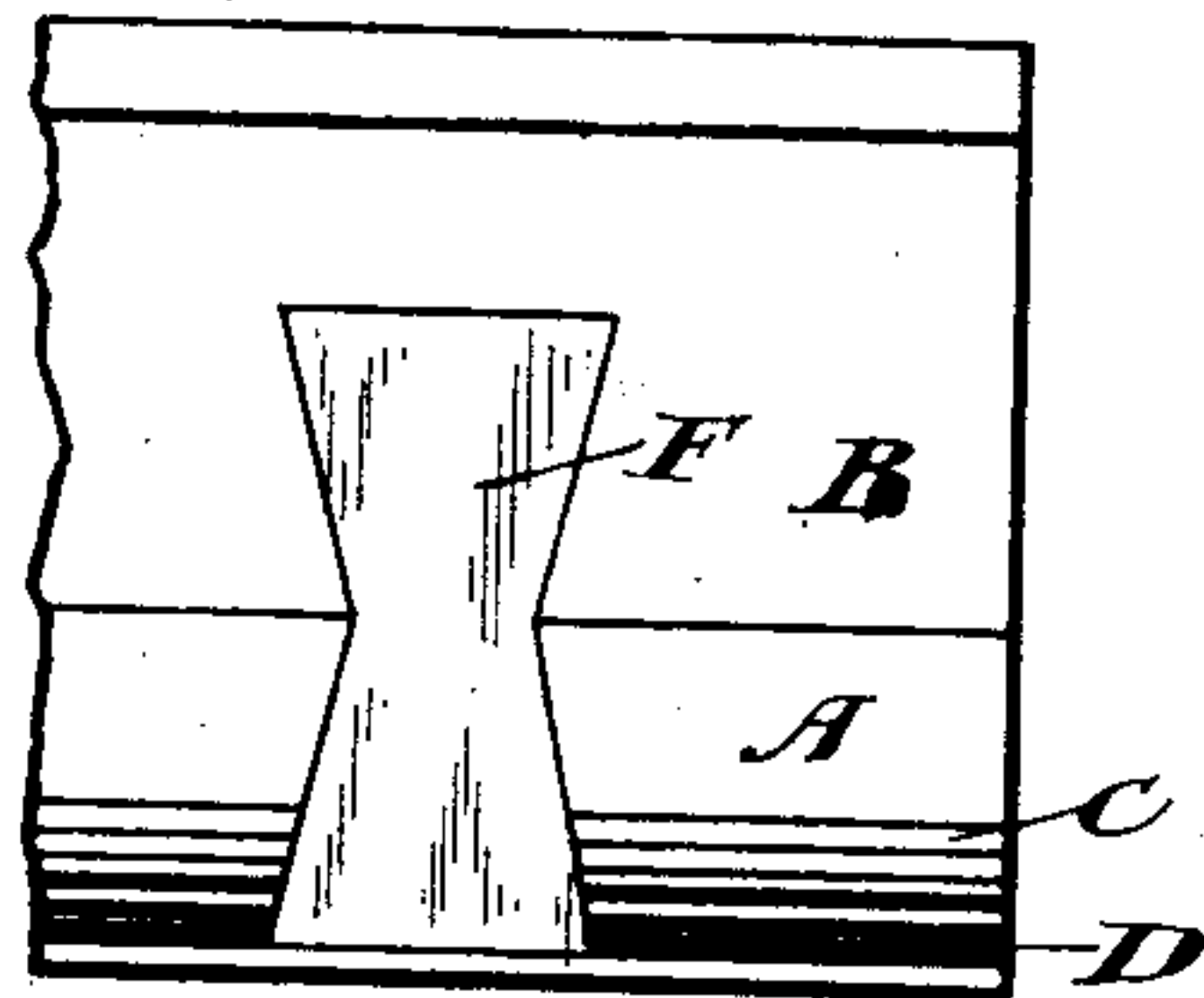
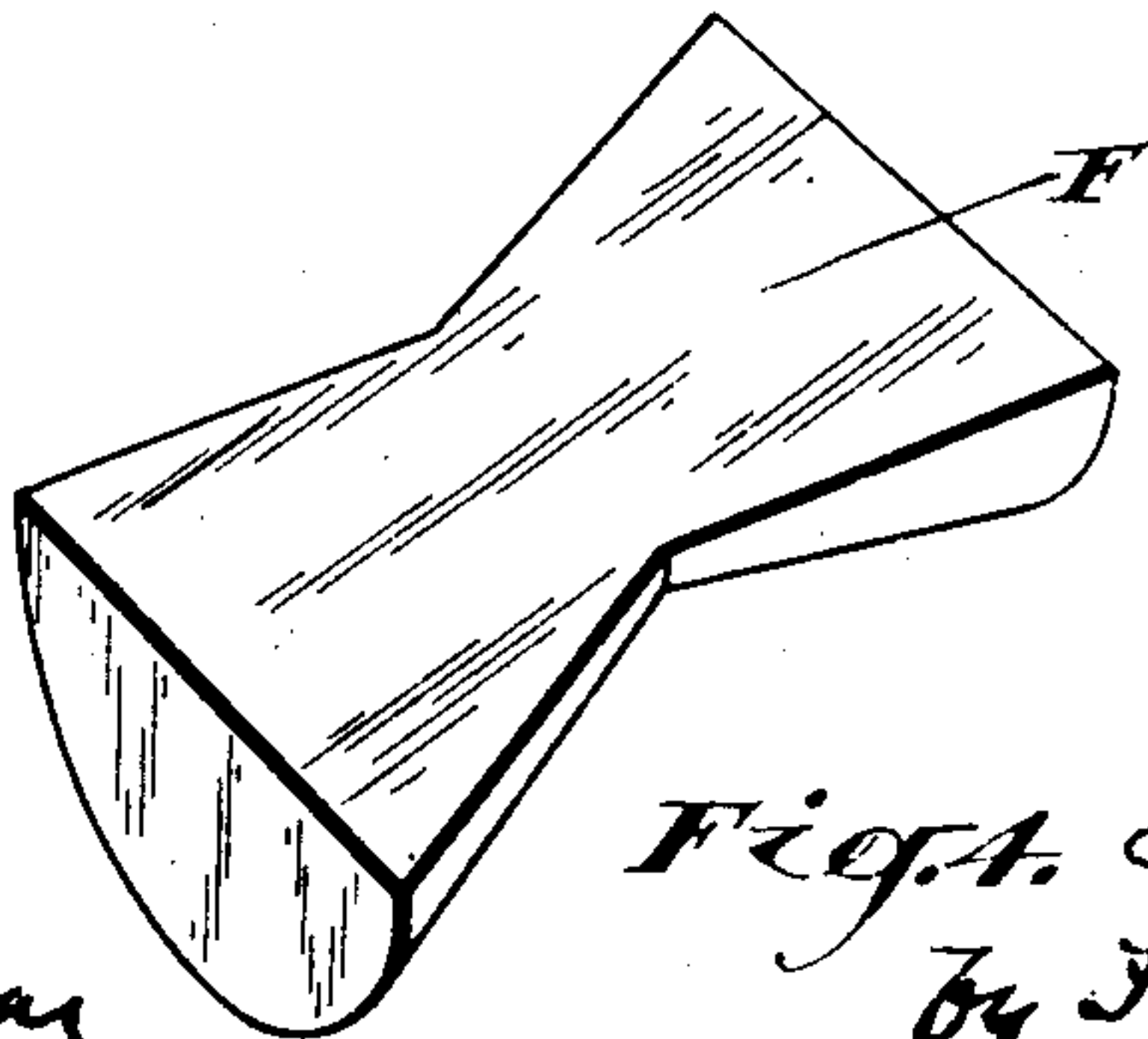


Fig. 3.



Witnesses.
L. J. Jumble
O. J. Jumble

Inventor.
Louis Gassard
by Fetherstonhaugh & Co.
Attys.

UNITED STATES PATENT OFFICE.

LOUIS GASSARD, OF TORONTO, CANADA, ASSIGNOR TO THOMAS GABRIEL MASON, OF TORONTO, CANADA.

WREST-PLANK.

SPECIFICATION forming part of Letters Patent No. 711,564, dated October 21, 1902.

Application filed January 11, 1902. Serial No. 89,381. (No model.)

To all whom it may concern:

Be it known that I, LOUIS GASSARD, pianomaker, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Wrest-Planks, of which the following is a specification.

My invention relates to improvements in wrest-planks or pin-blocks for pianofortes patented to Vincent M. Risch, of the city of Toronto, county of York, in the Dominion of Canada, under No. 34,451, and in the United States of America under No. 439,688, and assigned to Thomas Gabriel Mason, of the same place; and the object of the invention is to improve the means for binding together the piano-frame and the several parts of the wrest-plank or pin-block, and thereby make it absolutely firm and unyielding and at the same time increase the strength of the connecting means, while diminishing the liability of such means giving under strain; and it consists, essentially, of a piano-frame having, in combination with the elements of such frame, a semidouble-ended truncated cone, the flat side being placed uppermost or flush with the ends of the frame, while the rounded ends fit into corresponding recesses in the different boards comprising the frame, the bases of the double-truncated cone being outermost and the parts being fitted together, as hereinafter more particularly explained.

Figure 1 is a perspective view of portion of a frame of a piano, showing the application of my invention. Fig. 2 is a cross-section. Fig. 3 is a plan view. Fig. 4 is a detail of the split double-truncated-cone connecting-block.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the plank or portion running the full length of the back. This portion is preferably made of maple or other suitable hard wood.

B is a portion of the upright frame of the piano, made of pine or soft wood.

C is the front veneer or layers of maple or other suitable wood which is glued onto the plank A.

D represents suitable layers of veneer, made of maple or other suitable wood glued together, usually with the grain of each run-

ning at right angles or diagonally to the next one, the innermost side of the layer being glued to the layers C.

E represents planks, made of hard wood, running the whole length of the frame and forming part thereof. They are glued to the portion B for the purpose of strengthening the back and top of the frame.

F represents semidouble-truncated keys, which are made of hard wood. The rounded ends of the keys fit into corresponding recesses made in the portions B at the back and the portions A, C, and D at the front, the central point of the keys being opposite the dividing-line between A and B, and the front of the keys being flush with the front of the portion D, and the back of the key being intermediately placed between the front and back of the portion B.

The key F, it will be understood from what has been before described, is a double-truncated cone cut in half, the smaller diameter being at the center, or nearly so, and the larger diameter at the ends. From such a construction of key it will be seen that not only have I got the lateral resistance at the sides, but an equal resistance all around the sides and bottom, thereby serving to take the strain of the strings in the pin-block D C in such a manner as to prevent outward movement of the pin-block and the portion A from the portion B and at the same time resist the downward pull of the strings upon the pins *d*. In other words, not only are the portions D, C, and A held to the portion B, so as to prevent outward movement, but also an outward downward bend, to which there is necessarily a tendency on account of the location of the pins.

I need not in this specification describe the state of the art, as it has been described in a former patent, before referred to. I am aware that in this former patent the keys were flat keys of double-dovetail form. In such form there was a tendency for the sides of the dovetail to split under the strain and render them no more useful than if they were straight keys. By my invention, however, the semidouble-truncated-cone-shaped keys distribute the strain around the under periphery of both ends, and thereby the secure and rigid

connection of the parts is assured, so that there is no yielding to the strain of the strings under any conditions.

What I claim as my invention is—

- 5 In a pianoforte, the combination with the wrest-plank or pin-block and the frame A, B, C, D, E, of the semidouble-truncated-cone-shaped keys narrow at the center and flaring at the ends and having the curved periph-
10 eries forming longitudinally a broad V-shaped resisting medium all around from the top of one edge to the top of the opposite edge, such

peripheries fitting into corresponding recesses between the glue-jointed portions of the pin-block with the center at the main 15 joint, whereby a maximum resistance against the spreading of the glued parts is effected all around the contacting portions of the key as specified.

LOUIS GASSARD.

Witnesses:

J. B. BOYD,
L. TRIMBLE.