

W. R. MILLER.

Insulators for Musical Instruments.

No. 158,856.

Patented Jan. 19, 1875.

Fig. 1.

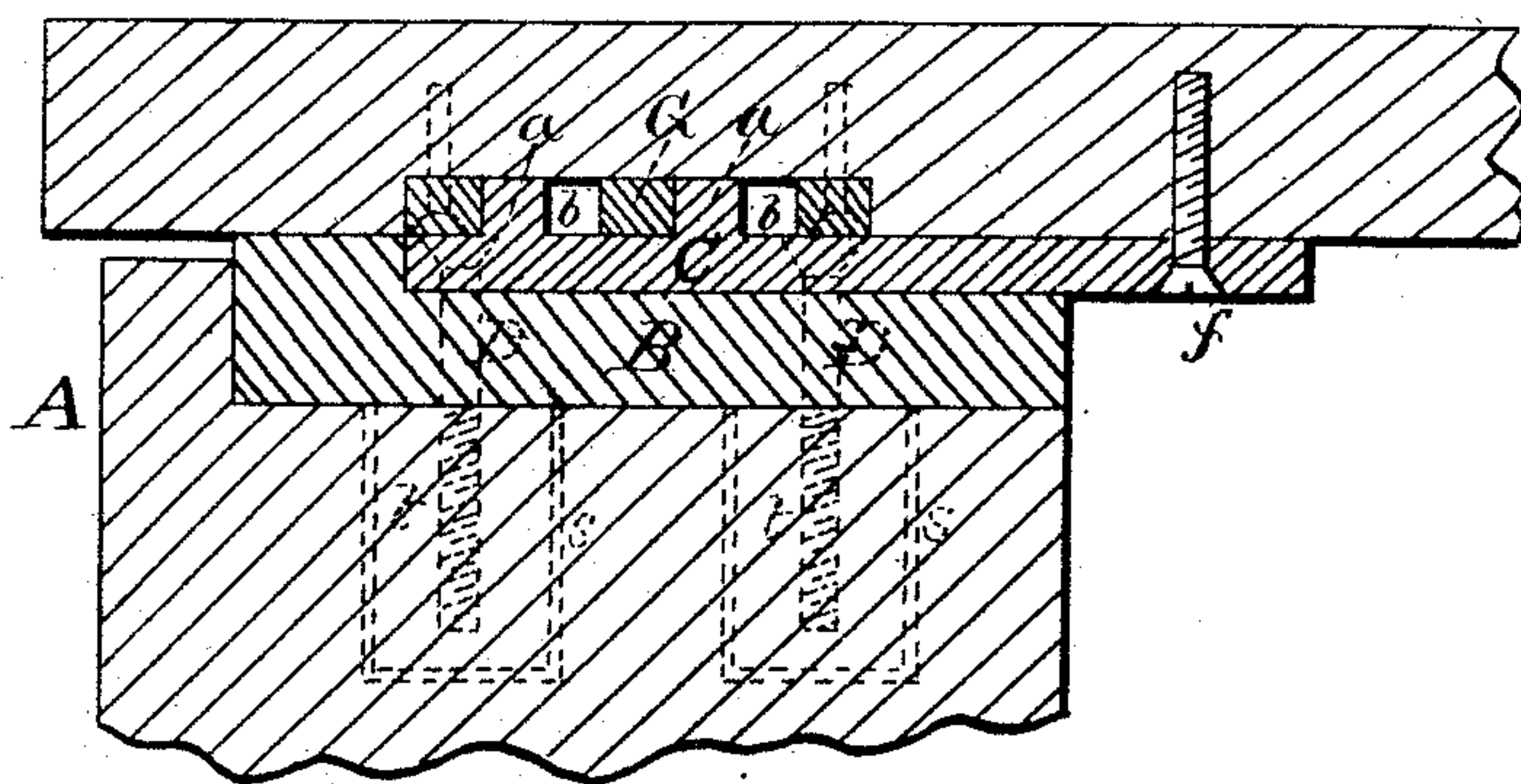


Fig. 2.

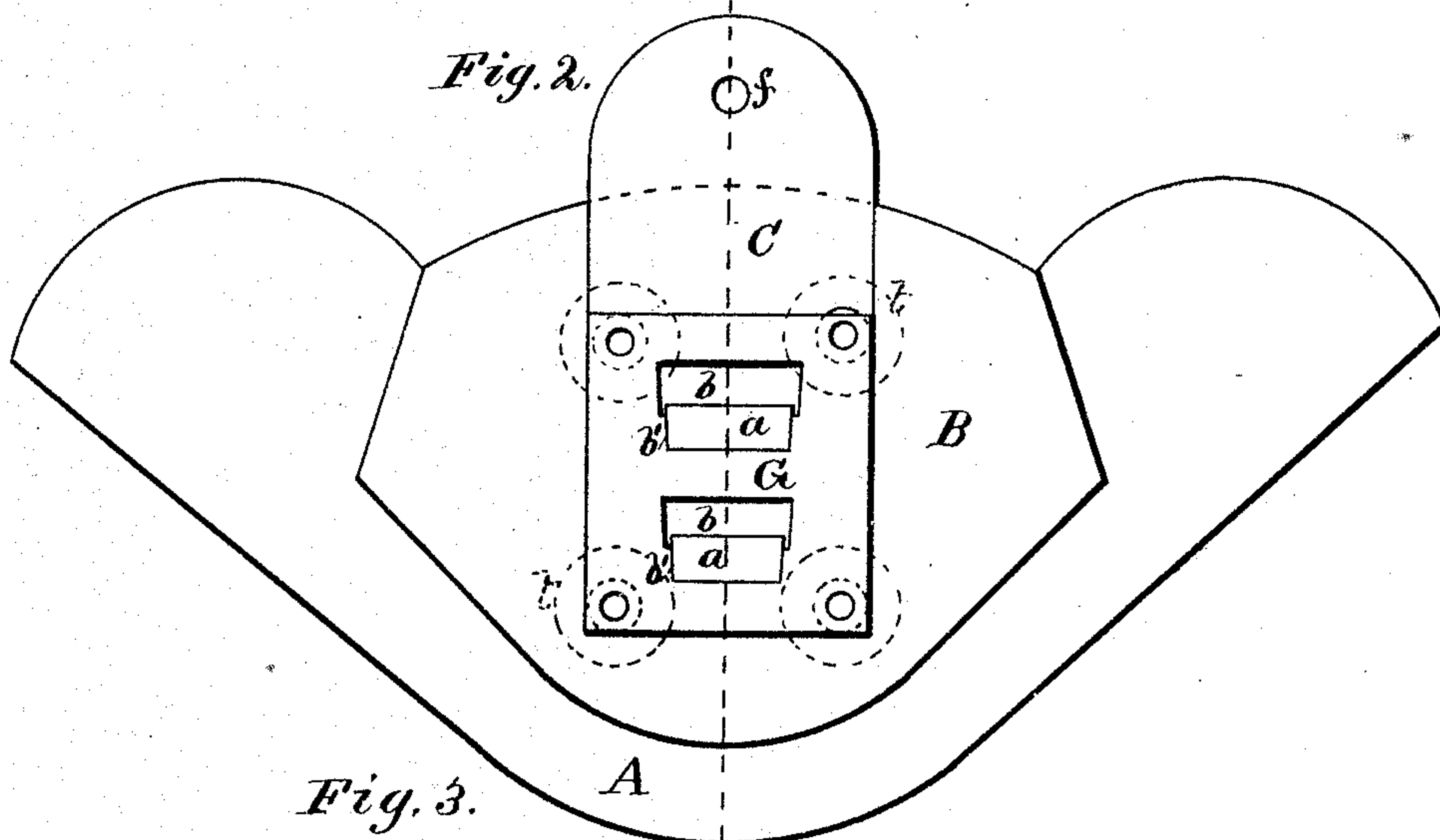
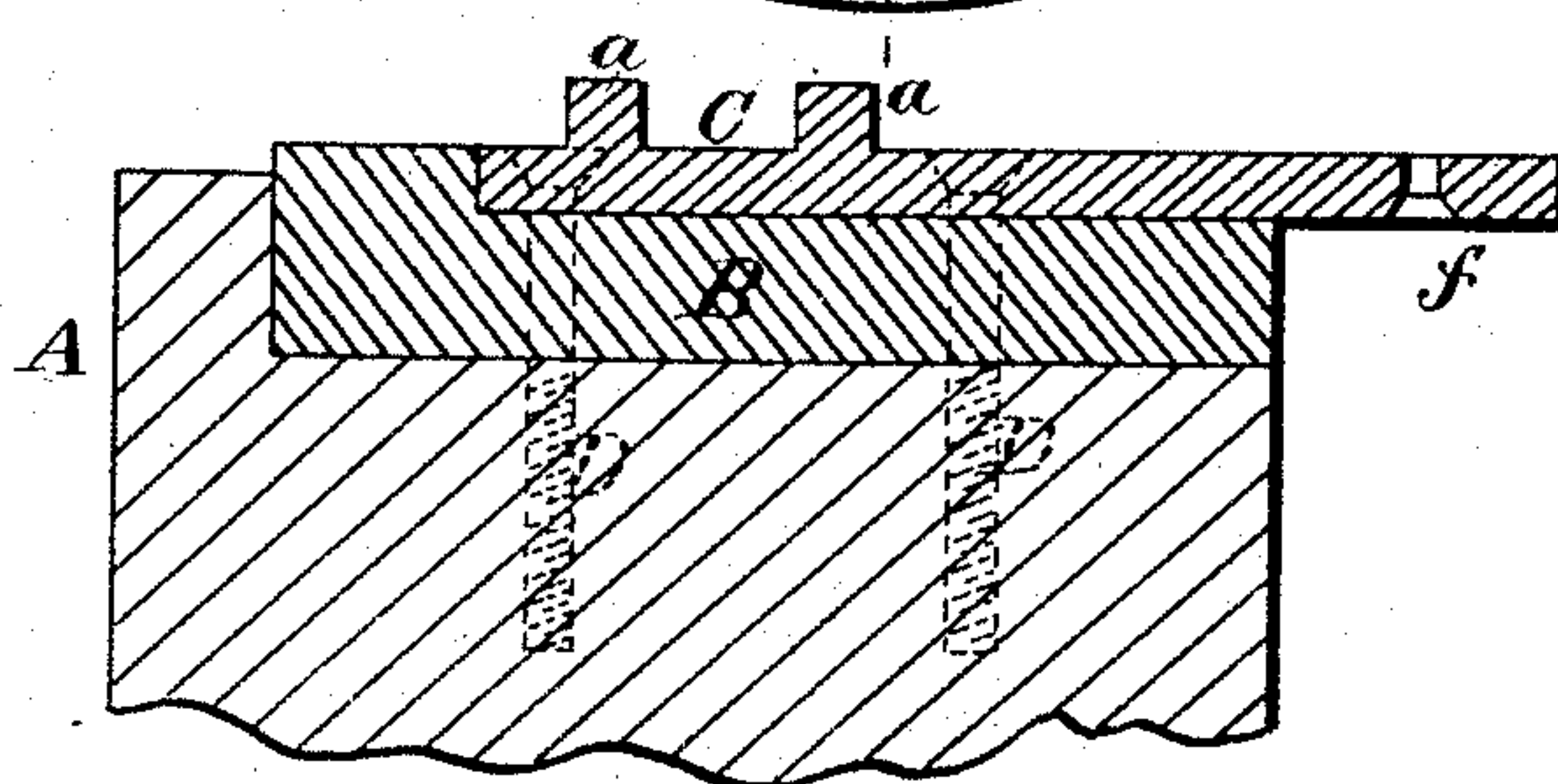


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM R. MILLER, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN INSULATORS FOR MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **158,856**, dated January 19, 1875; application filed December 17, 1874.

To all whom it may concern:

Be it known that I, WM. R. MILLER, of Baltimore, county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Insulator for Piano-Forte, of which the following is a specification:

My present invention is intended as an improvement upon the piano-forte attachment for which Letters Patent No. 154,066 were granted to me August 11, 1874; and the nature of my invention consists in fastening the insulator between the leg and the metallic plate which forms the leg-connection by screws passing through the insulator into the leg, thereby relieving the insulator from all strain, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a central vertical section of my invention, showing bushing in dotted lines. Fig. 2 is a top view of the piano-leg, insulator, and plate. Fig. 3 is a central vertical section of my invention, showing screws without bushing.

A represents the top of the piano-leg, provided with a cavity to receive the insulator B. This insulator is made preferably of glass, but it may be of any other suitable material that is a non-conductor of sound, and should be of such thickness as to project a certain distance above the upper surface of the leg. In the upper surface of the insulator B is made a recess to receive a plate, C, the upper surface of which is flush with the upper surface of the insulator, and is fastened by means of screws D D, which pass through holes made for that purpose in the insulator, and screw firmly into the leg, or into a bushing, *t*, inserted in the leg, and insulated by means of glue, the insula-

tor becoming thus clamped between the leg and said plate. On the upper surface of the plate C are formed dovetailed lugs *a a*, which pass into vertical holes *b b*, and then laterally into dovetail grooves *b' b'* in a plate, G, which is fastened in a recess in the under side of the piano-case.

It will, of course, be obvious that the lugs *a* may be on the plate E, and the slots and grooves in the plate C, if desired.

By the above-described mode of fastening the insulator between the leg and the plate C, the screws D D passing through the insulator into the leg, all strain is entirely removed from the insulator.

The inner end of the plate C projects beyond the leg, as shown, and when the leg is put on the piano a screw is passed through a hole, *x*, in the plate into the piano-case, thereby securing it firmly, and when thus secured it will be seen that there is no connection between the piano-case and the leg; or, in other words, the leg and case do not come into direct contact at any point.

Instead of having the plate C sunk into the insulator it may be placed on the surface thereof and sunk into the case, if so desired.

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

The combination and arrangement of the plate C, insulator B, and leg A, substantially as shown and described, so that the screws D D pass through the plate and insulator and into the leg, thereby relieving the insulator from any strain, as set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 11th day of December, 1874.

WM. R. MILLER.

Witnesses:

JAS. F. DUHAMEL,
THOMAS BYRNE.