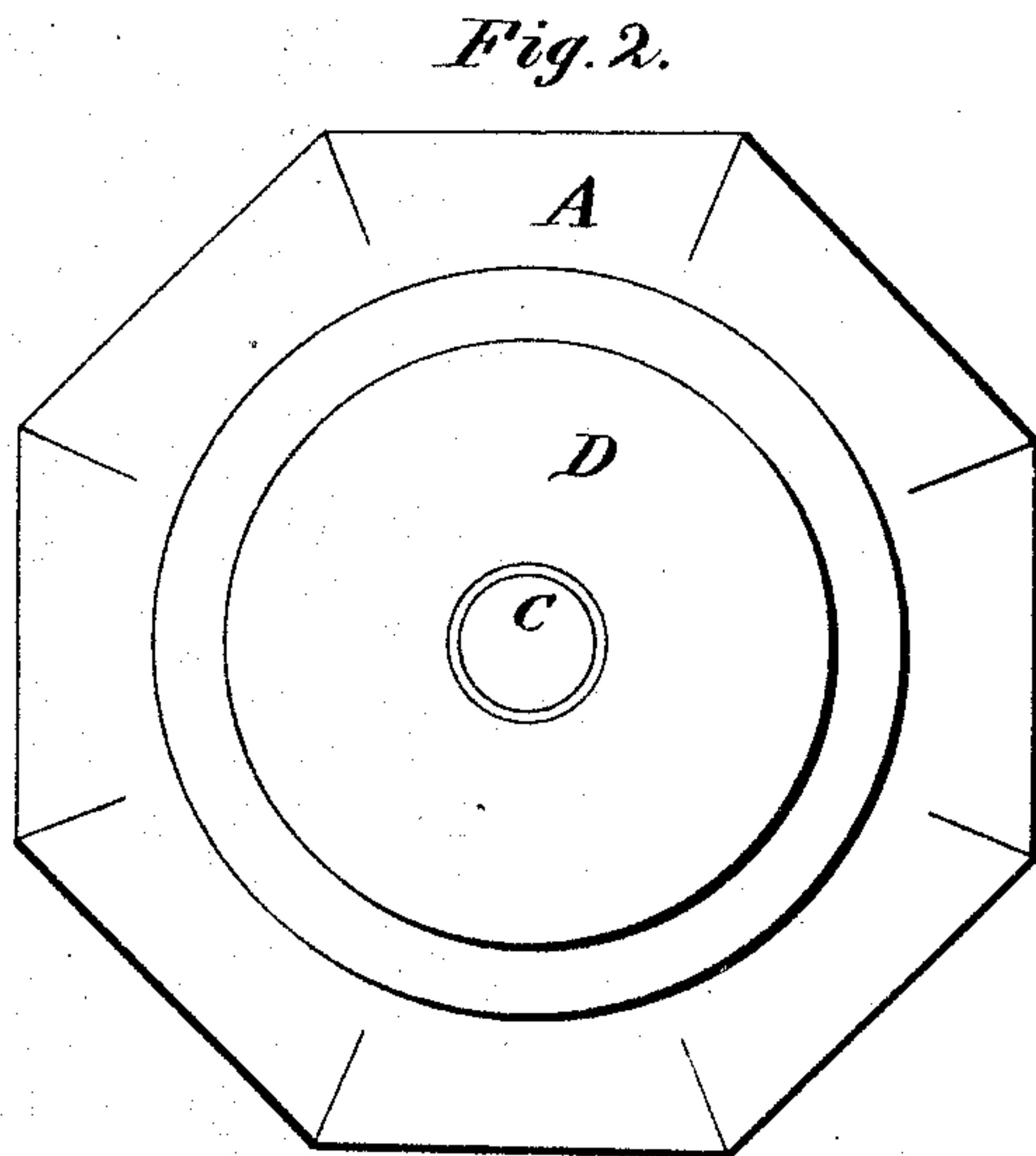
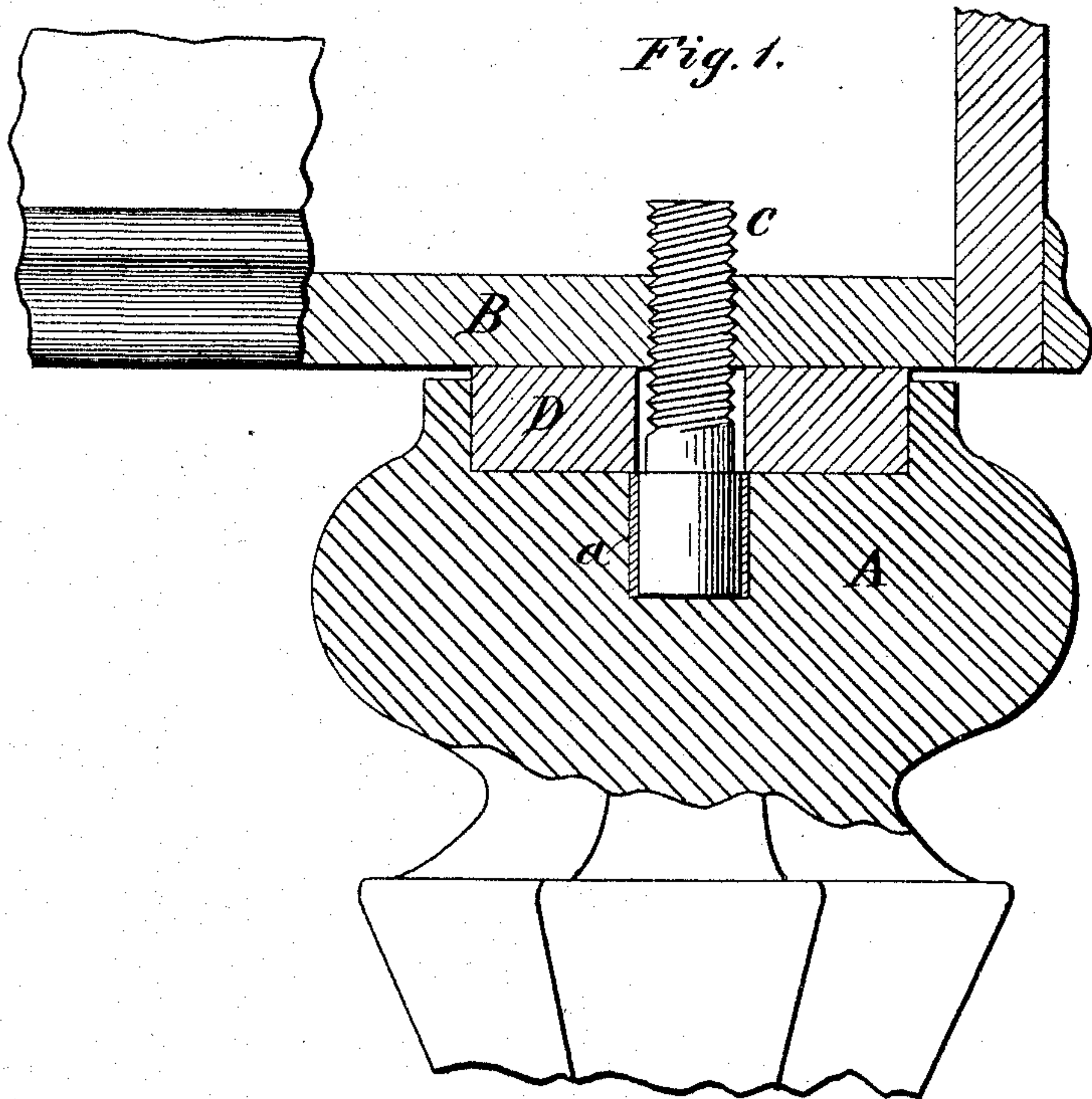


W. R. MILLER.
Piano-Insulator.

No. 159,342.

Patented Feb. 2, 1875.



Witnesses:
J. F. Duhamel
Thomas Byrne

Inventor.
Wm. R. Miller
Per *H. J. Affot.*
A. Thruy.

UNITED STATES PATENT OFFICE.

WILLIAM R. MILLER, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN PIANO-INSULATORS.

Specification forming part of Letters Patent No. **159,342**, dated February 2, 1875; application filed December 4, 1874.

To all whom it may concern:

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

My invention relates to insulators for pianos, and is intended as an improvement upon the Letters Patent No. 154,066 and 155,099, granted to me August 11, 1874, and September 15, 1874, respectively.

The nature of my invention consists in a section of glass or equivalent material, arranged between the top of the leg and the case, having a hole through which the screw passes, in combination with the screw and the leg, 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 part of this specification, and in which—

Figure 1 is a central vertical section. Fig. 2 is a plan view of the leg, with the insulator.

A represents the upper part of a piano-leg, and B is a part of the bottom of the piano. C is the screw used for connecting the leg to the piano. This screw is embedded in the leg, and insulated by means of a rubber ring, *a*, surrounding the screw—that is, inserted between the leg and the screw, and then glued; or it may be glued by using silicate of soda or

ordinary glue. D represents a disk of glass or equivalent material, and is made of suitable shape, according to the shape of the leg, so as to be embedded in the upper end of the leg, and project a short distance above the upper surface thereof. The screw C passes up through a hole in the insulating-section D. The leg is now screwed into the piano, thereby clamping the insulator tightly between the leg and the piano-frame, the insulator preventing the leg and bottom of the piano from coming in contact.

The pressure will be perfectly even on the insulator, and there is no strain on the same caused by any screws or other means of attachment.

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

An insulator made of glass or equivalent non-conductor of sound, consisting of a disk provided with a central opening for the passage of the holding-screw of a piano-leg, when interposed between the top of the leg and bottom of a piano, and arranged substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 1st day of December, 1874.

WM. R. MILLER.

Witnesses:

J. F. DU HAMEL,
W. K. DU HAMEL.