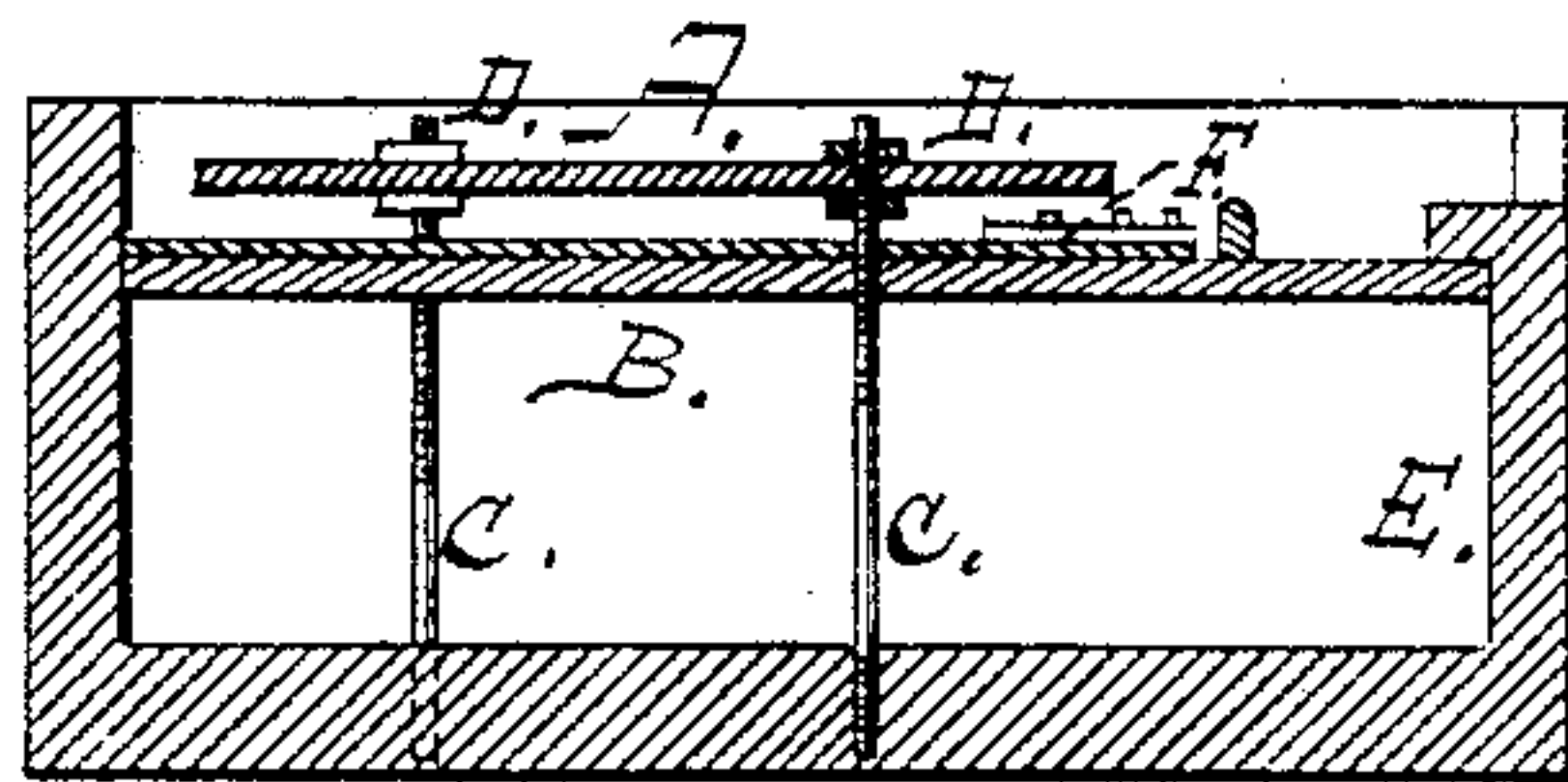
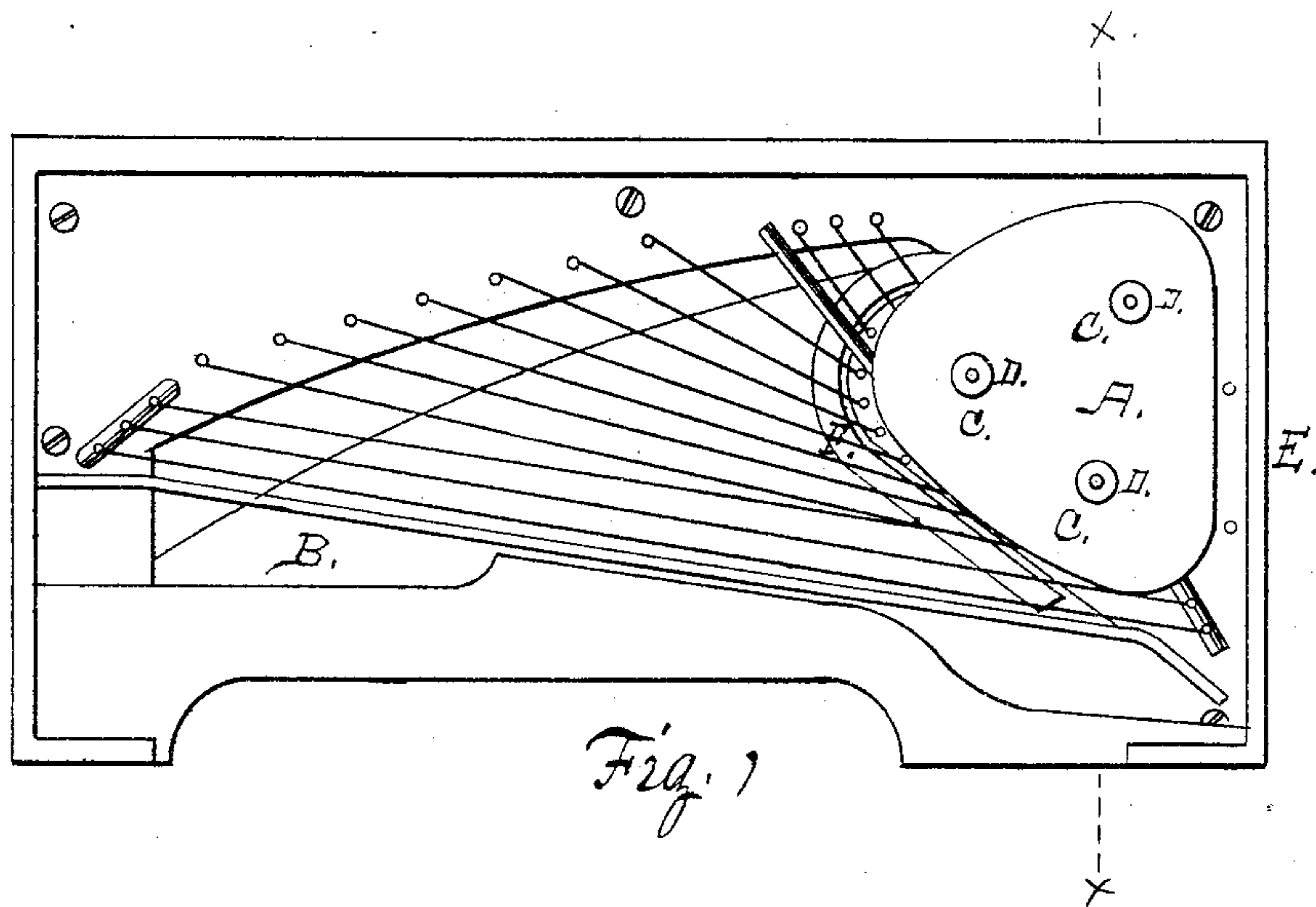


S. P. HINDS.  
Piano-Forte Sounding-Boards.

No. 197,971.

Patented Dec. 11, 1877.



Witness  
Horace Harris  
J. R. M. Wair.  
Inventor  
Silas P. Hinds.

# UNITED STATES PATENT OFFICE.

SILAS P. HINDS, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN PIANO-FORTE SOUNDING-BOARDS.

Specification forming part of Letters Patent No. **197,971**, dated December 11, 1877; application filed April 28, 1877.

*To all whom it may concern:*

Be it known that I, SILAS P. HINDS, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Sounding-Boards for Piano-Fortes, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a plan, and Fig. 2 a cross-section on the line of *x x*.

The object of my invention is the construction and arrangement of an auxiliary or sounding-board for pianos, to be entirely detached from the sides of the instrument, so that its whole circumference or edge shall be free to vibrate unobstructed; to be adapted to grand, square, upright, or any other styles of pianos; to be made of wood, glass, or other material, and to be applied to the instrument in the progress of construction, or after it is finished.

The sounding-board A is supported above the main sounding-board B, and above the plate, bridges, and strings, by one or more supports or posts, C, to which it is secured through its central portion by check-nuts D, and from thence the supports pass down through the board B to the bottom or bed of the piano E; or these parts may connect below with the board B, or with the plate F, and extend no lower. The check-nuts are to regulate the height of the board A above the strings, bridges, &c. This board has no other connection with the piano than by the sup-

ports named, and the edges are therefore entirely free, and the board is allowed the most perfect vibration; or the auxiliary board A may be placed below the main sounding-board B, supported by the same posts C, connected with the bed of the instrument, and graduated in its height by the check-nuts, as before named; or the supports may extend above the auxiliary board A, and connect with the board B or plate, as before shown; or it may be desirable to attach a board above and below at the same time in the order herein set forth.

In all these variations the one principle of the invention is preserved—the isolation of the board A from contact with the piano, held by supports connecting with its internal portion. Therefore,

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The auxiliary sounding-board A, sustained by one or more centrally-attached supports, C, only, in combination with the sounding-board B, substantially as and for the purpose specified.

2. In combination with the board B, the auxiliary board A, entirely detached from the sides of the piano, and made adjustable upon the supports C by means of the check-nuts D, substantially as and for the purpose set forth.

SILAS P. HINDS.

Witnesses:

HORACE HARRIS,  
J. R. MCNAIR.