J. FAIRMAN.
Piano-Supports.

No. 198,727. Patented Dec. 25, 1877.

Fig. 2.

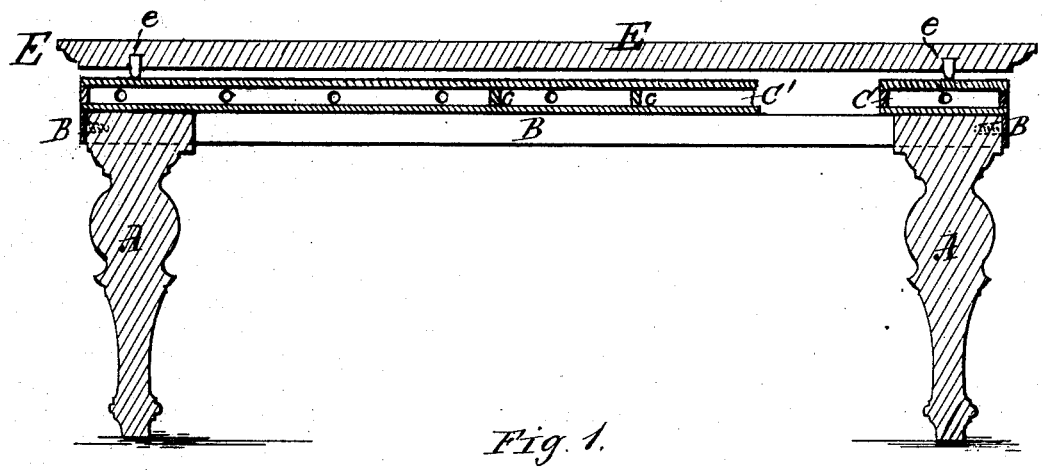
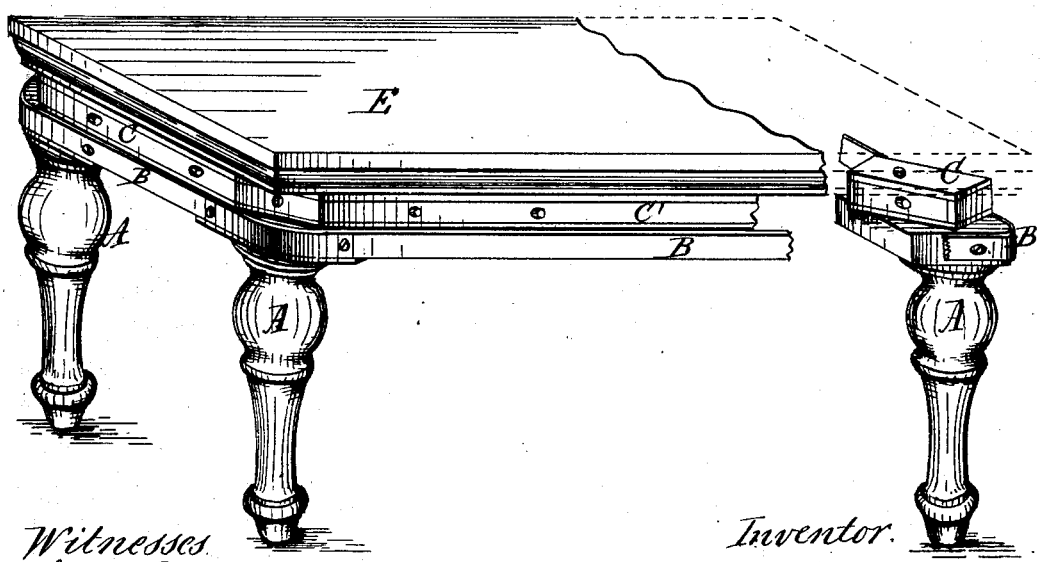


Fig. 1.



Witnesses.
Henry Orth
H. H. Bliss.

Inventor.
James Fairman
by H. H. Doubleday
Atty.

UNITED STATES PATENT OFFICE.

JAMES FAIRMAN, OF NEW YORK, N. Y.

IMPROVEMENT IN PIANO-SUPPORTS.

Specification forming part of Letters Patent No. **198,727**, dated December 25, 1877; application filed June 8, 1877.

To all whom it may concern:

Be it known that I, JAMES FAIRMAN, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Piano-Supports; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to increase the volume of tone of a piano, and to improve its quality; and to this end it consists, essentially, in mounting a piano upon a resonant chamber, or upon a series of chambers, connected with the legs and with each other by means of a suitable frame-work, or girts, or ties, which are independent of the piano-case.

Figure 1 is a perspective view of my improved resonant platform, showing also the base of the piano; and Fig. 2 is a longitudinal vertical section.

A A represent the legs of an ordinary piano. B is a girt or tie extending around the outside of the legs, and firmly secured to them, the legs and tie thus constituting a frame adapted in form to receive and support a piano.

The tie may be arranged upon either the inside or outside of the legs; or any other convenient or desired method of connecting or bracing the legs may be adopted.

C C′ are resonant chambers or boxes, mounted upon the legs; and as the construction of these chambers may be varied by making holes in their sides or tops or bottoms, or by putting supporting posts or partitions *c* in them, or by making other modifications, I do not wish to be limited by the construction here shown.

The resonant chamber C′ is arranged to extend the entire length of the piano.

E represents the base of the piano, and *e e* are pins or points attached thereto, and resting upon the resonant chambers.

Any desired number of such pins may be employed, and they may be attached to either the piano-body or to the platform or ribs, or some other device may be substituted for them; or, under some circumstances, they may be dispensed with altogether, and the piano-body may rest directly upon the resonant chamber or chambers. In practice, however, I prefer the construction shown, believing that the best results can be attained thereby.

It will be readily understood by those who are familiar with the laws of acoustics that the effect of thus mounting a piano is substantially the equivalent, in kind, of mounting the strings of a violin upon its hollow body, and that the vibrations of the air within these chambers will add materially to the tone of the instrument.

Under some circumstances I propose to make the resonant chamber the full size of the bottom of the piano, in which case it will be necessary to leave an open space of the proper form to admit the pedal-harp and the levers connected with and actuated by the pedals. Ordinarily, however, I prefer to employ one of these chambers for each leg of the piano, and connect the chambers and legs by means of the ribs or bars, or other suitable frame-work; or, when preferred, the legs may be attached firmly to the resonant chambers, the chambers being secured to each other by proper girts, bars, or frame-work; or, when a single chamber is employed of nearly the full size of the bottom of the piano, the legs may be attached to this chamber.

I do not claim in this patent, broadly, the idea of interposing vibratory chambers or resonant chambers between the legs and body of a piano, as that is set forth and described in an earlier patent of mine; but in that earlier patent the chambers were independent of each other, neither the chambers nor the piano-legs being connected with each other, except through the medium of the body of the piano; whereas, in this invention, the legs are supported in their relative positions independently of the piano. Hence I do not wish to be limited to the precise construction shown or described, as many modifications might be made without departing from the spirit of my invention, which consists, essentially, in uniting or connecting the legs of a piano by means of a resonant chamber or resonant chambers and a frame-work, ribs, or girts, whereby an inde-

pendent resonant or vibratory support for a piano is formed.

What I claim is—

1. A resonant or vibratory support for a piano-body, consisting of a resonant chamber or a series of resonant chambers mounted upon the piano-legs, the legs being connected with each other independently of the body of the piano, substantially as set forth.

2. As a support for a piano-body, a resonant or vibratory chamber or chambers mounted upon the upper ends of the legs, and points or small supporting-surfaces interposed between the piano-body and the resonant or insulating chamber or chambers, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES FAIRMAN.

Witnesses:

HOWARD PAYSON WILDS,

WILLIAM D. PAGE.