

(No Model.)

H. SOHMER.

PIANO FORTE.

No. 358,946.

Patented Mar. 8, 1887.

fig. 1.

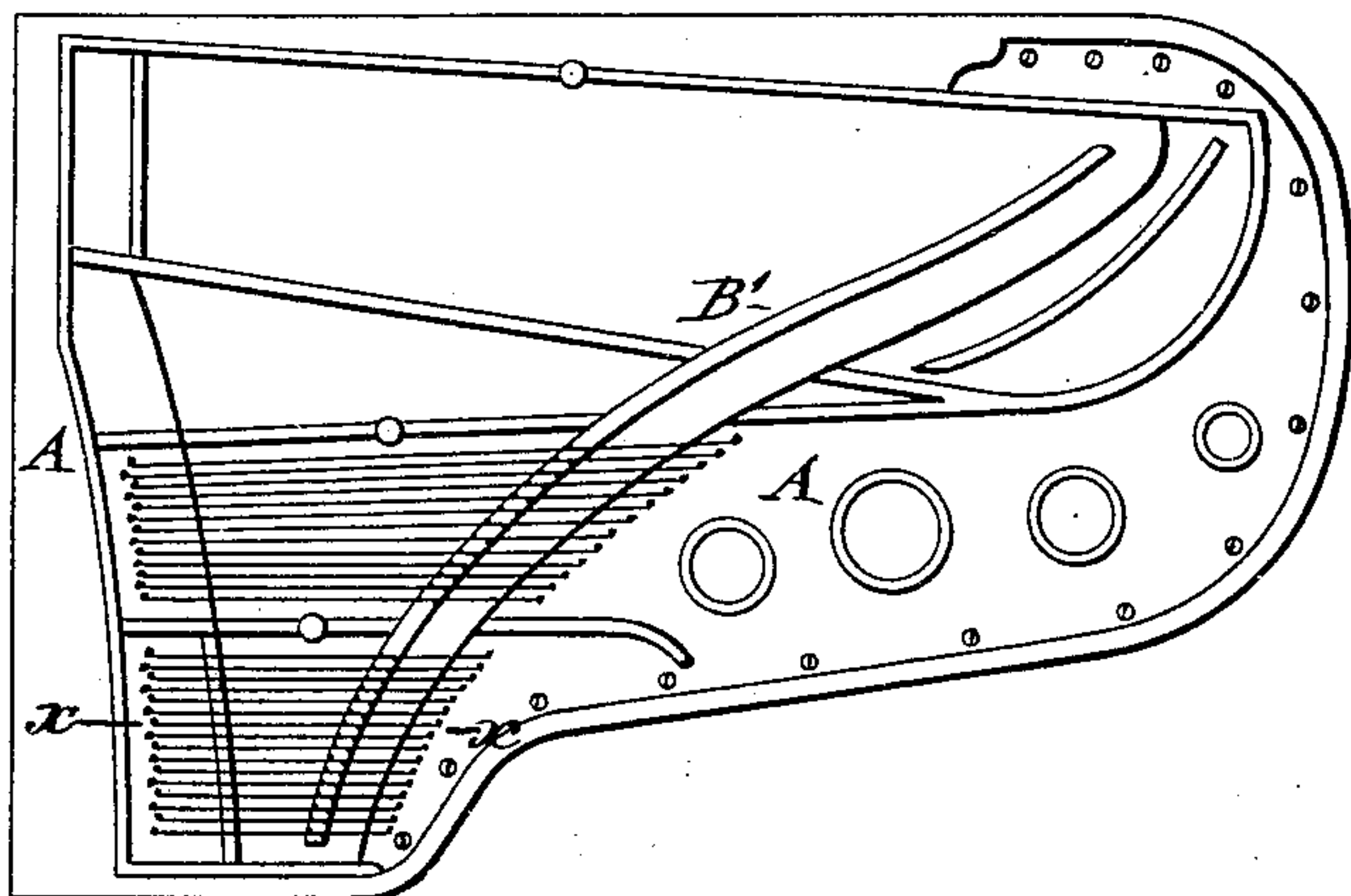


fig. 2.

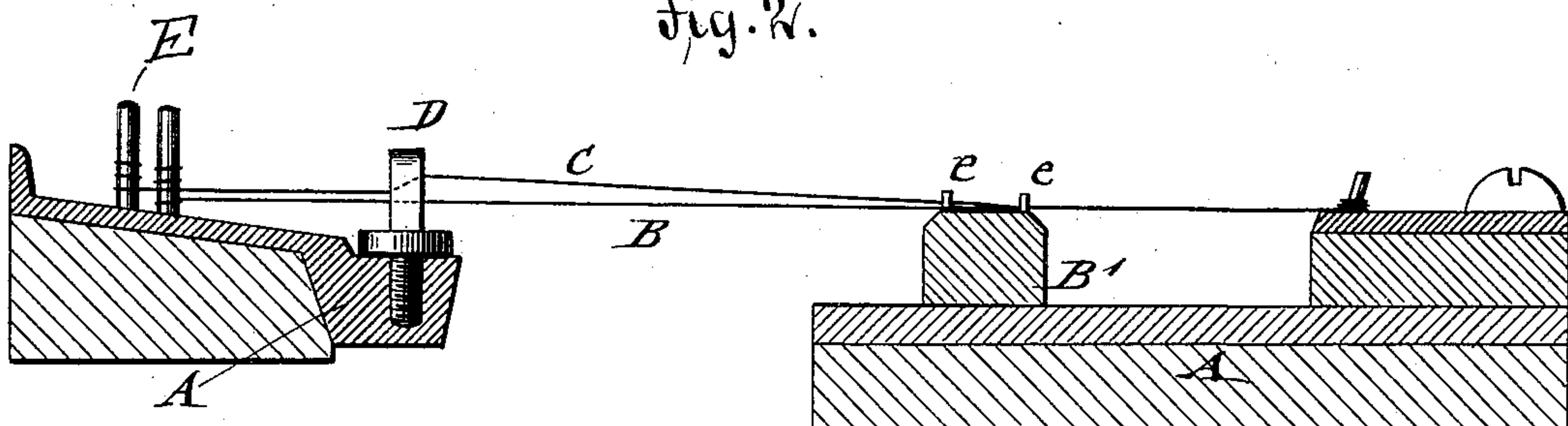


fig. 3.

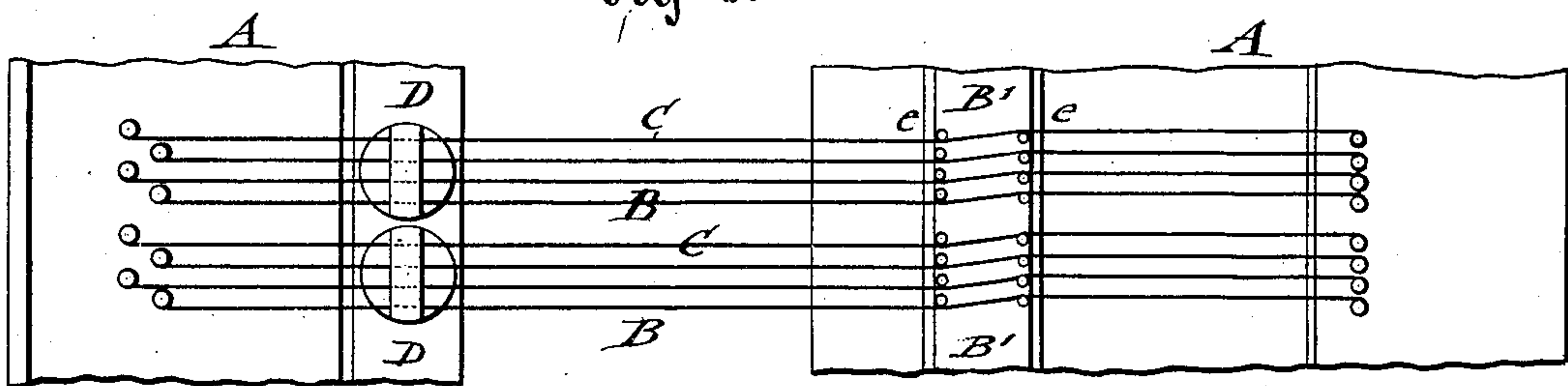
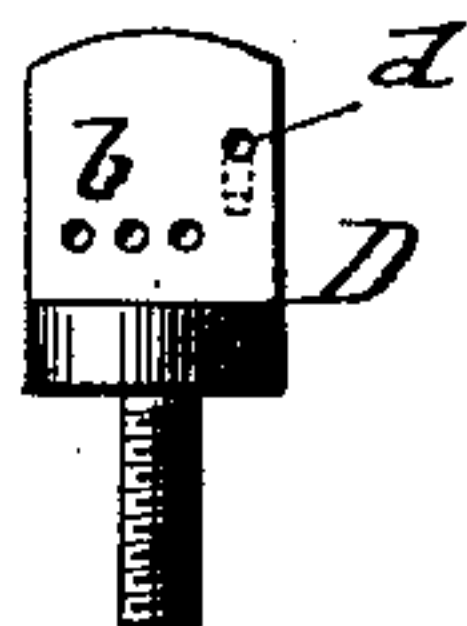
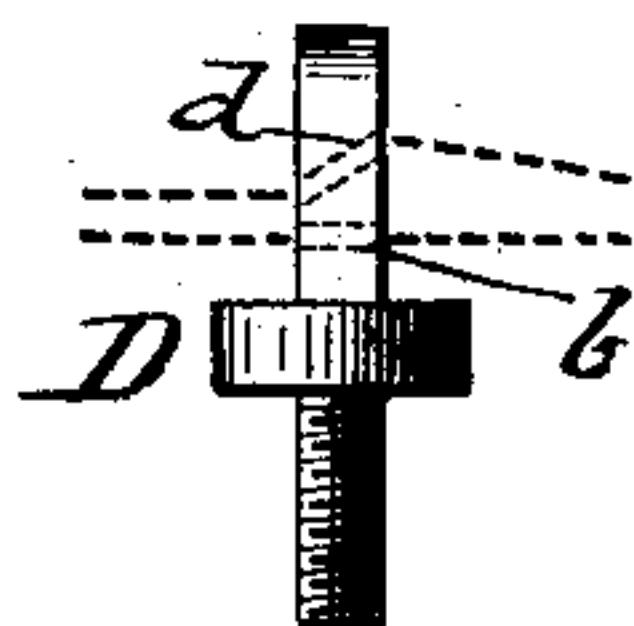


fig. 4.

fig. 5.

WITNESSES:

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PIANO-FORTE.

SPECIFICATION forming part of Letters Patent No. 358,946, dated March 8, 1887.

Application filed March 5, 1886. Serial No. 194,090. (No model.)

To all whom it may concern:

Be it known that I, HUGO SOHMER, of the city, county, and State of New York, have invented certain new and useful Improvements in Piano-Fortes, of which the following is a specification.

This invention relates to certain improvements in pianos of that class in which auxiliary strings of the same pitch are arranged in connection with the main strings, so as to vibrate in sympathy therewith and serve to re-enforce the tone and sounding quality of the piano; and the invention consists of a piano in which are arranged above the main strings auxiliary tone-re-enforcing strings, which are stretched through the same eyes as the main strings, but passed through inclined guide-holes above the holes of the main strings, so as to be raised above the main strings.

In the accompanying drawings, Figure 1 represents a plan of a grand piano with my improved auxiliary strings arranged in connection with the treble and middle strings. Fig. 2 is a vertical longitudinal section on line *xx*, Fig. 1, drawn on a larger scale. Fig. 3 is a plan of Fig. 2, and Figs. 4 and 5 are respectively a detail side and end view of one of the eyes for supporting the main and auxiliary strings.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the frame of a piano, B' the sounding-board bridge, and B the main strings, which are stretched in the usual manner across the frame and sounding-board bridge.

The main strings B pass through holes of eyes D, or of a capodastro-bar attached to the frame near the tuning-pins E. Auxiliary re-enforcing strings C of the same pitch as the main strings are stretched in the same manner as the main strings C across the frame A and sounding-board bridge B', but supported above the main strings, so as not to be struck by the hammers by being passed through upwardly-inclined holes, *d*, which are arranged above the holes *b*, through which the main strings are passed, as shown in Fig. 2. The relative

position of the holes *b* and *d* in the eyes D are clearly shown in detail, Figs. 4 and 5.

The auxiliary strings C are strained on pins *e e* of the sounding-board bridge B' in the same manner as the main strings C, the auxiliary strings converging from the holes *d* of the eyes D toward the main strings as they approach the sounding-board bridge D.

The tuning-pins of the auxiliary strings C are arranged at the same side of the frame A as the tuning-pins of the main string C, so that the tuning of the main and auxiliary strings is accomplished at the same time and in an easy and convenient manner.

I prefer to arrange one or two auxiliary strings in connection with each treble-string and one auxiliary string in connection with each middle string. The tone of the treble and middle strings is re-enforced by the sounding of the sympathetic auxiliary strings as they are set in motion by the air-waves set up by the vibrations of the main strings when the latter are struck by the hammers. The auxiliary strings C increase or re-enforce thereby the tone of the main strings in the well-known manner by very simple means, so that the expense of the string-frame is but little increased, while the quality of the sound is greatly improved.

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

The combination, in a piano, with the main strings stretched in the usual manner, of auxiliary strings stretched above the main strings and eyes through which the main and auxiliary strings are passed, said eyes having holes for the main strings and upwardly-inclined holes located above the holes for the main strings for the auxiliary strings, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HUGO SOHMER.

Witnesses:

M. PARPART,
WILLIAM DETTENBORN.