

E. GABLER.
UPRIGHT PIANO.

No. 169,984.

Patented Nov. 16, 1875.

Fig: 1.

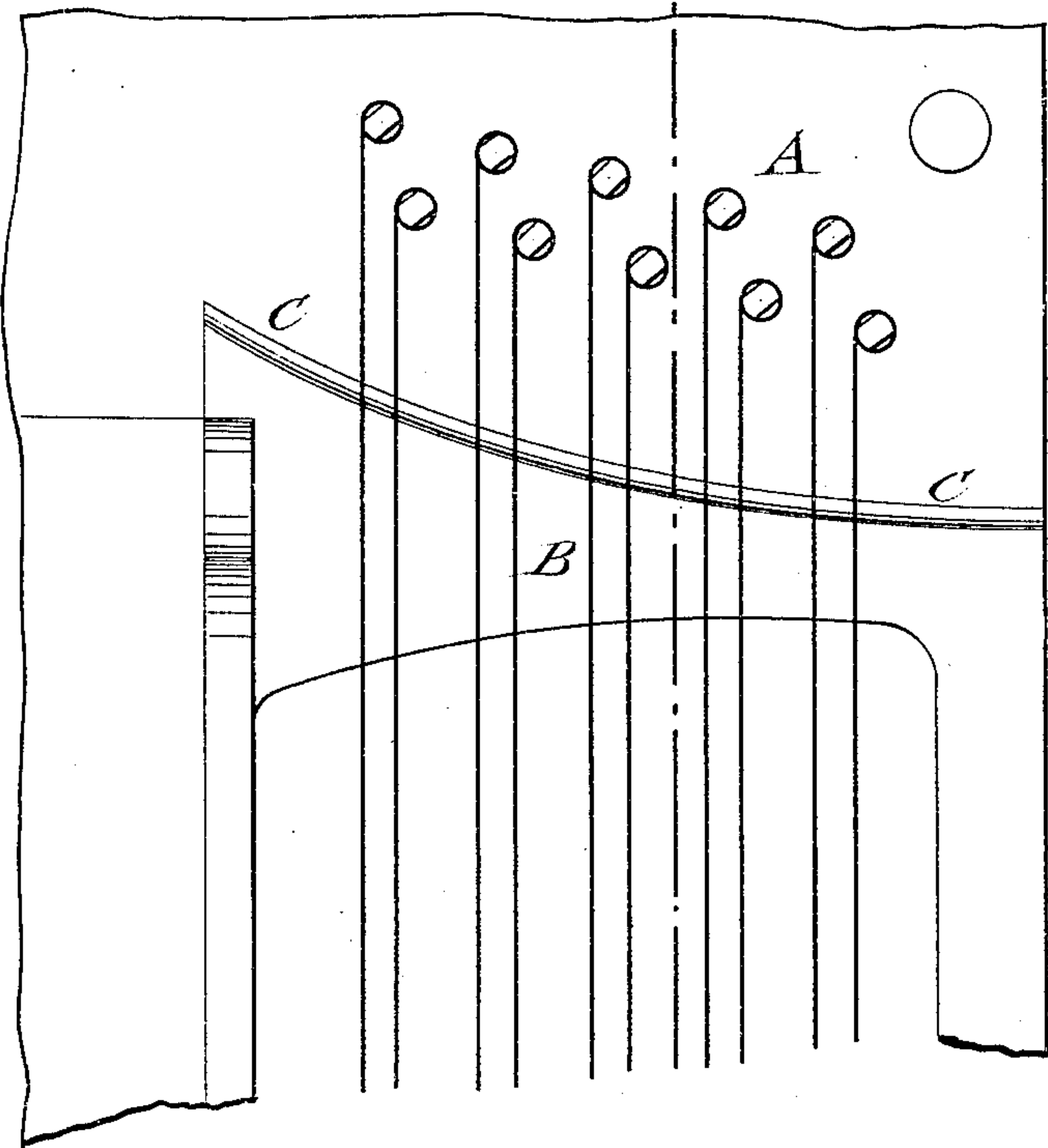
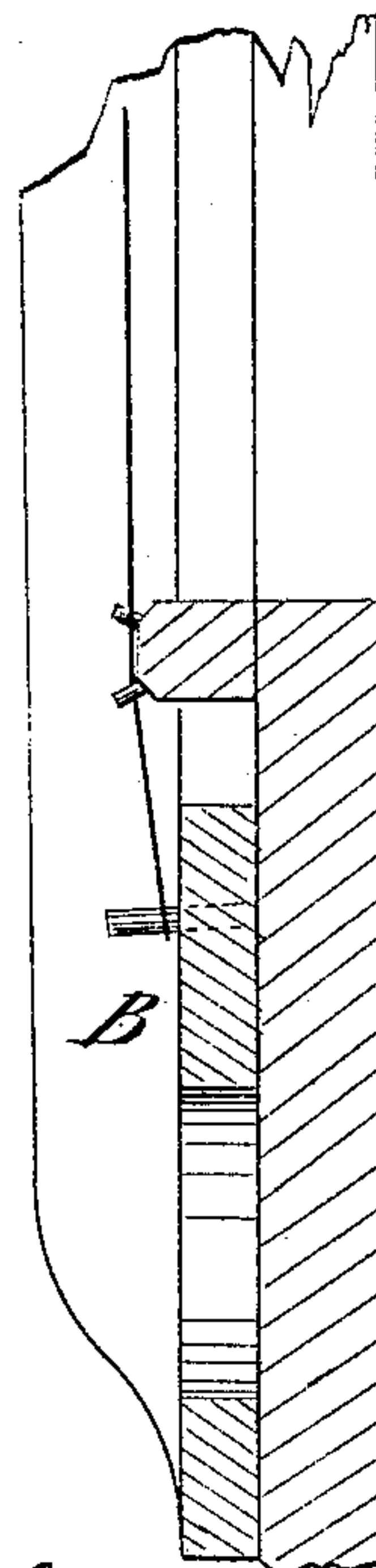
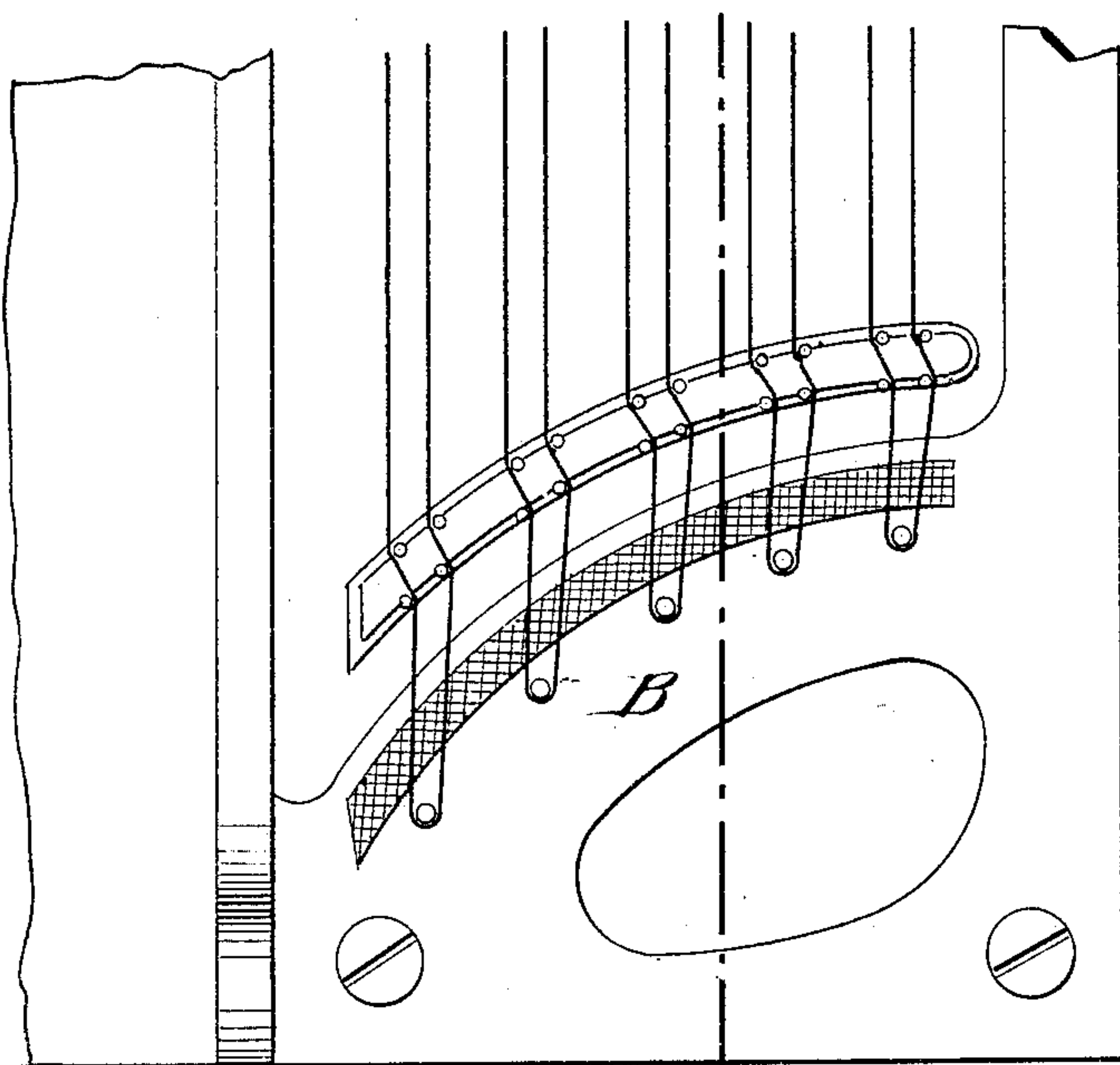
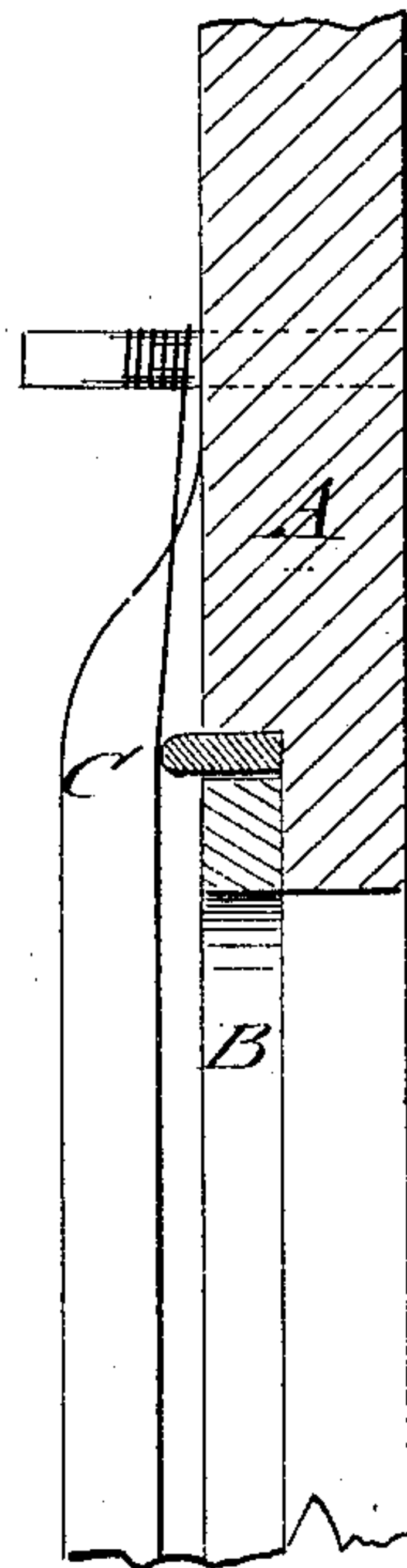


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ERNST GABLER, OF NEW YORK, N. Y.

IMPROVEMENT IN UPRIGHT PIANOS.

Specification forming part of Letters Patent No. **169,984**, dated November 16, 1875; application filed September 11, 1875.

To all whom it may concern:

Be it known that I, ERNST GABLER, of the city, county, and State of New York, have invented a new and Improved Agraffe-Bar for Upright Pianos, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation, and Fig. 2 a vertical transverse section on the line *c c*, of my improved agraffe-bar for upright pianos.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide for upright pianos an improved agraffe-bar, by which the sounding of the strings at the bridge of the wrest-plank is obviated, a more prolonged, clear, and bell-like ringing tone obtained, and a rigid locking of the agraffe-bar throughout its length by the pressure of the string-plate and strings is produced.

The invention consists of a metallic agraffe-bar, that is interposed between the wrest-plank and the plate, and retained in rigidly-fixed position by the plate as produced by the pressure of strings thereon.

In the drawing, A represents the wrest-plank, B the metallic string-plate, and C the agraffe-bar, of an upright piano. The agraffe-bar C is interposed between wrest-plank A and plate B, being made of bell-metal or other suitable material, and of sufficient height above the plate to allow the stretching of the strings. The shape of the metallic agraffe-bar C corresponds exactly to that of plate B, so that the

same bears equally throughout its entire length thereon, and locks the bar by the joint pressure of the strings rigidly against the wrest-plank. The perfectly rigid and fixed position of the agraffe-bar prevents the vibration and sounding of the steel wire bridge hitherto in use on the action of the hammer, and destroys thereby the sound caused by the same.

The tone of the strings is rendered fuller by the rigidity of the agraffe-bar, and the sounding of the wrest-plank in consequence of the vibration of the strings neutralized by the strong compound pressure exerted by the strings on the string-plate and bar, and by the same on the wrest-plank. The fixed position of the agraffe-bar and the powerful pressure exerted on the wrest-plank produce the isolation of the wrest-plank from the plate and a superior tone of the piano.

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

In upright pianos, the combination, with the wrest-plank and the string-plate, of an interposed isolating agraffe-bar, secured rigidly against the wrest-plank by the compound pressure of the strings on the plate, substantially in the manner and for the purpose specified.

ERNST GABLER.

Witnesses:

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