G. Gemunder,

Violin,

No. 70,991. Patented Nov. 19, 1867.

Fig 1.

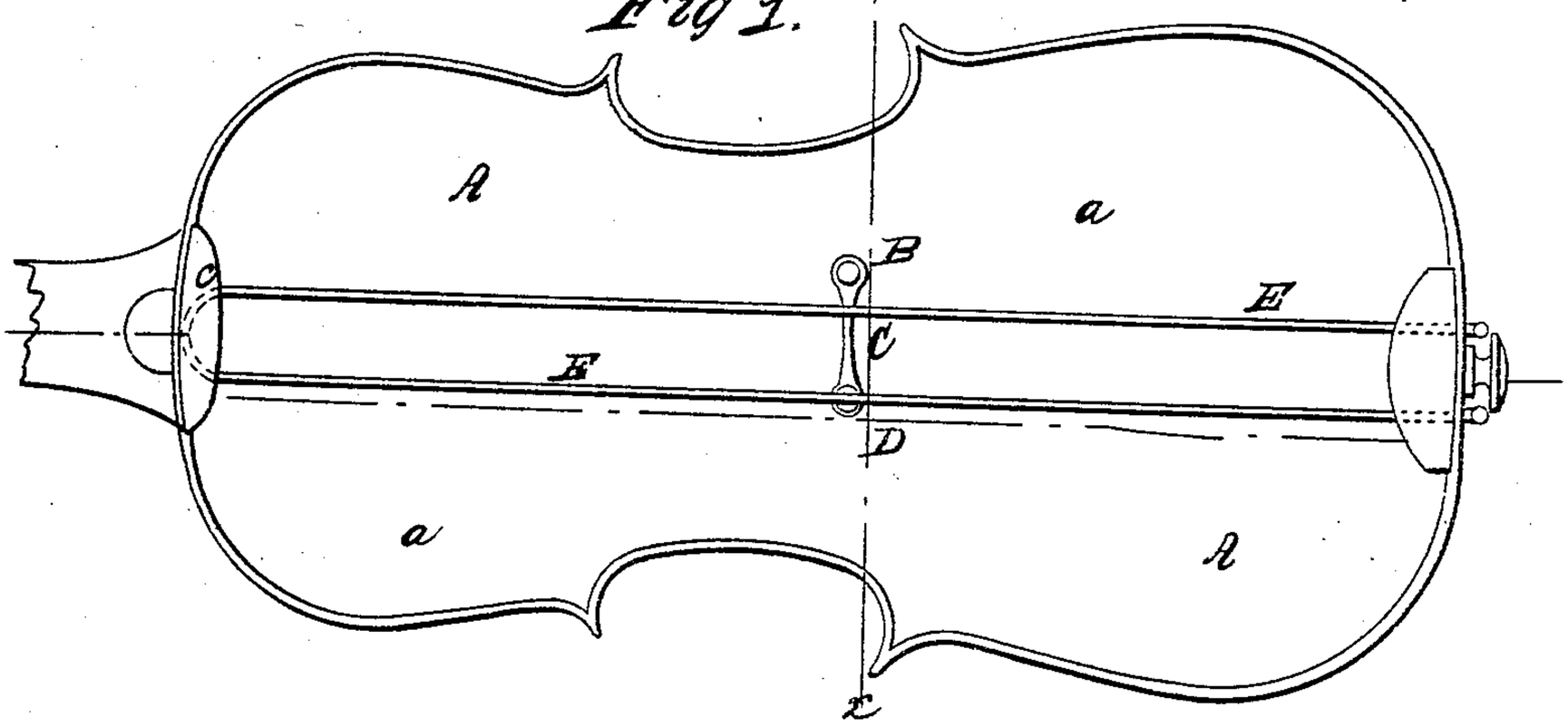


Fig 2.

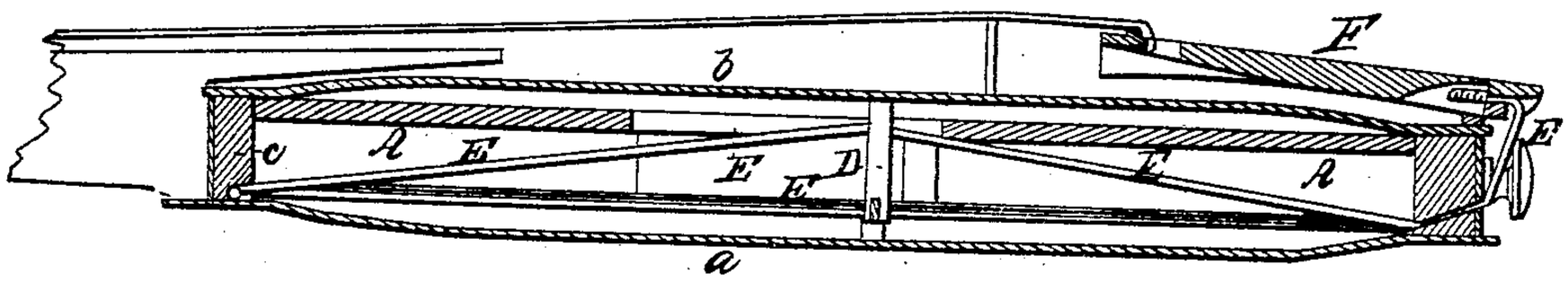
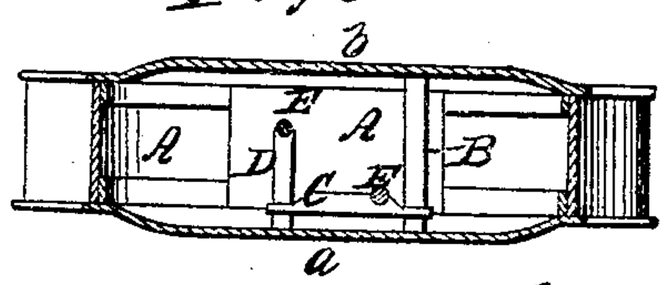


Fig 3.



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AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

United States Patent Office.

GEORGE GEMÜNDER, OF NEW YORK, N. Y.

Letters Patent No. 70,991, *dated November* 19, 1867.

IMPROVEMENT IN VIOLINS AND OTHER BOW INSTRUMENTS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE GEMÜNDER, of the city, county, and State of New York, have invented a new and useful Improvement in Bow Instruments; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a plan view of my invention, the cover of the instrument being removed.

Figure 2 is a longitudinal central section of the same.

Figure 3 is a transverse section of the same, the plane of section being indicated by the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new manner of arranging the sound-posts in violins, violoncellos, bass-violins, tenor-violins, or other bow instruments, so that a greater equality of sounds may be produced, and so that the tones may be propagated with more clearness, power, and distinctness, than they could on instruments in which the ordinary sound-posts are used.

The invention consists in connecting the ordinary solitary sound-post, by means of a bridge, with a second sound-post which does not reach to the top plate of the instrument. A string is laid upon the upper end of the secondary sound-post, said string being, with both ends, secured to the tail-piece of the instrument, and passing through the block arranged in the front end of the same. The secondary sound-post, and with it the top and bottom plates of the instrument are, by this arrangement, connected with the tail-piece, and thereby with the main strings of the instrument, thereby producing more and finer vibrations, and consequently better and more complete tones. The complete sound is heard, as no part of it is retained in the instrument.

A represents the case or box of a bow instrument. *a* is its bottom, and *b* its top plate. B is the ordinary sound-post, arranged between the plates *a* and *b*, to transfer the vibrations from one to the other. It is, by means of a bridge, C, connected with another post, D, which is secured to the plate *a*, and which does not reach to the plate *b*, being shorter than the post B, as is clearly shown in fig. 3. E is a gut-string, secured with both ends to the tail-piece F of the instrument, and passing through the block *c*, which is arranged in the front end of the case A. Two arms are thus formed of the string E, of which one passes over the post D, resting upon the upper end of the same, while the other passes over the bridge C, resting upon the same, or not, as may be desired. The main strings of the instrument are also secured to the tail-piece F, and thus, as the main strings are stretched by means of the pegs, the string E will also be stretched, and will thereby rest heavier upon the post D. The plate *a* will thereby become strained and its vibration increased, as well as that of the plate *b*, with which it is connected by means of the post B. Instead of one string, two or more may be used, but that one arm which passes over the post D is of the greatest importance; the other can be dispensed with. The string E may, if desired, be secured to screws or pegs arranged in the back of the instrument, in which case the strings E must be stretched separately, they not being connected with the tail-piece F. The bridge C, connecting the posts B and D, transmits the vibration from one to the other.

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

1. Arranging an additional sound-post, D, within the case of a bow instrument, substantially as and for the purpose herein shown and described.

2. Combining the additional sound-post D with a string, E, which passes over it, substantially as and for the purpose herein shown and described.

3. Connecting the sound-posts of a bow instrument by means of a string, E, and the tail-piece F, with the main strings of the instrument, substantially as herein shown and described.

4. The bridge C, for connecting the post D with the main sound-post B, substantially as and for the purpose herein shown and described.

GEO. GEMÜNDER.

Witnesses:

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