

(No Model.)

J. GRAMER.

METALLIC FRAME FOR PIANOS.

No. 351,696.

Patented Oct. 26, 1886.

Fig. 1.

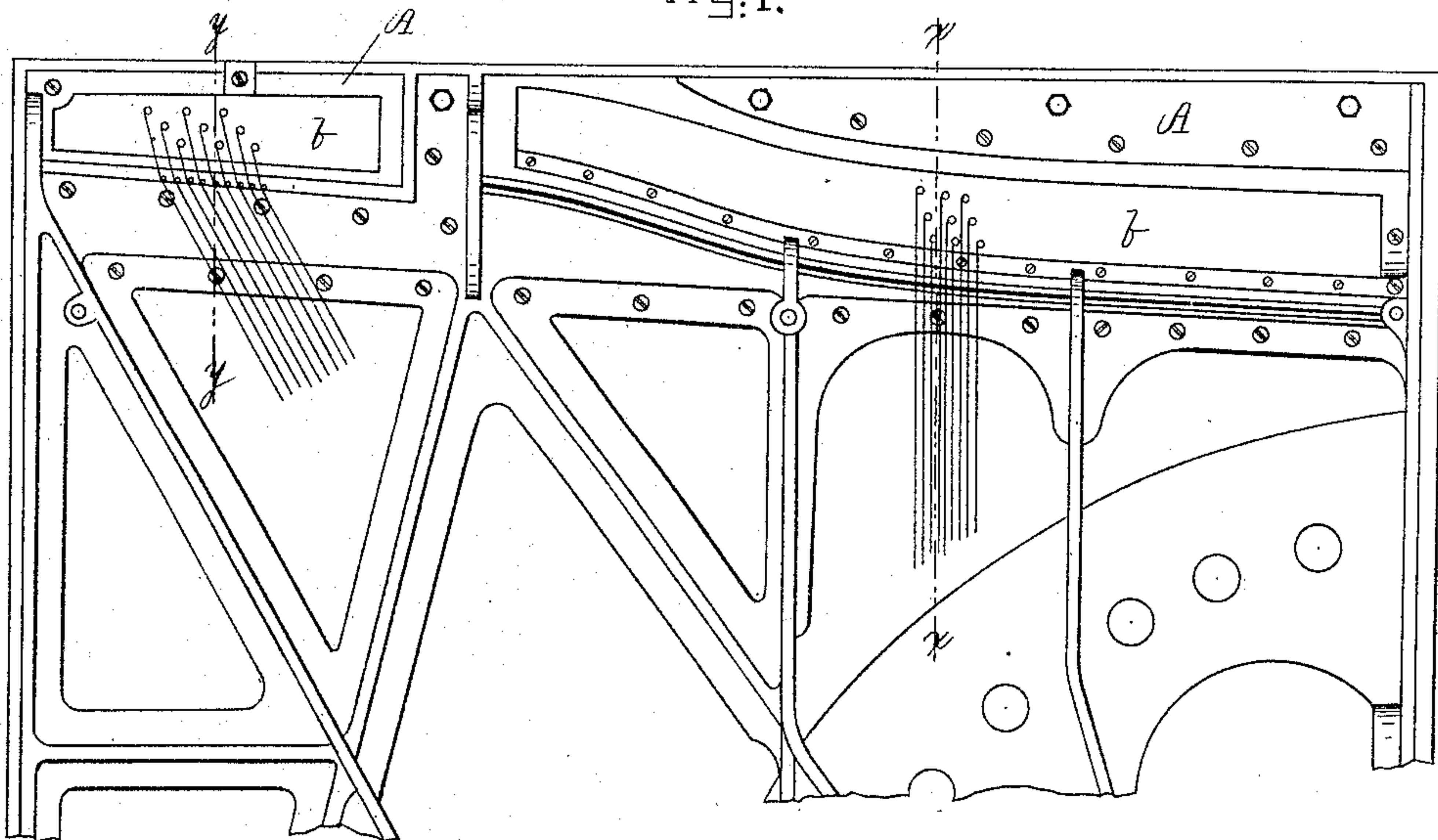


Fig. 3.

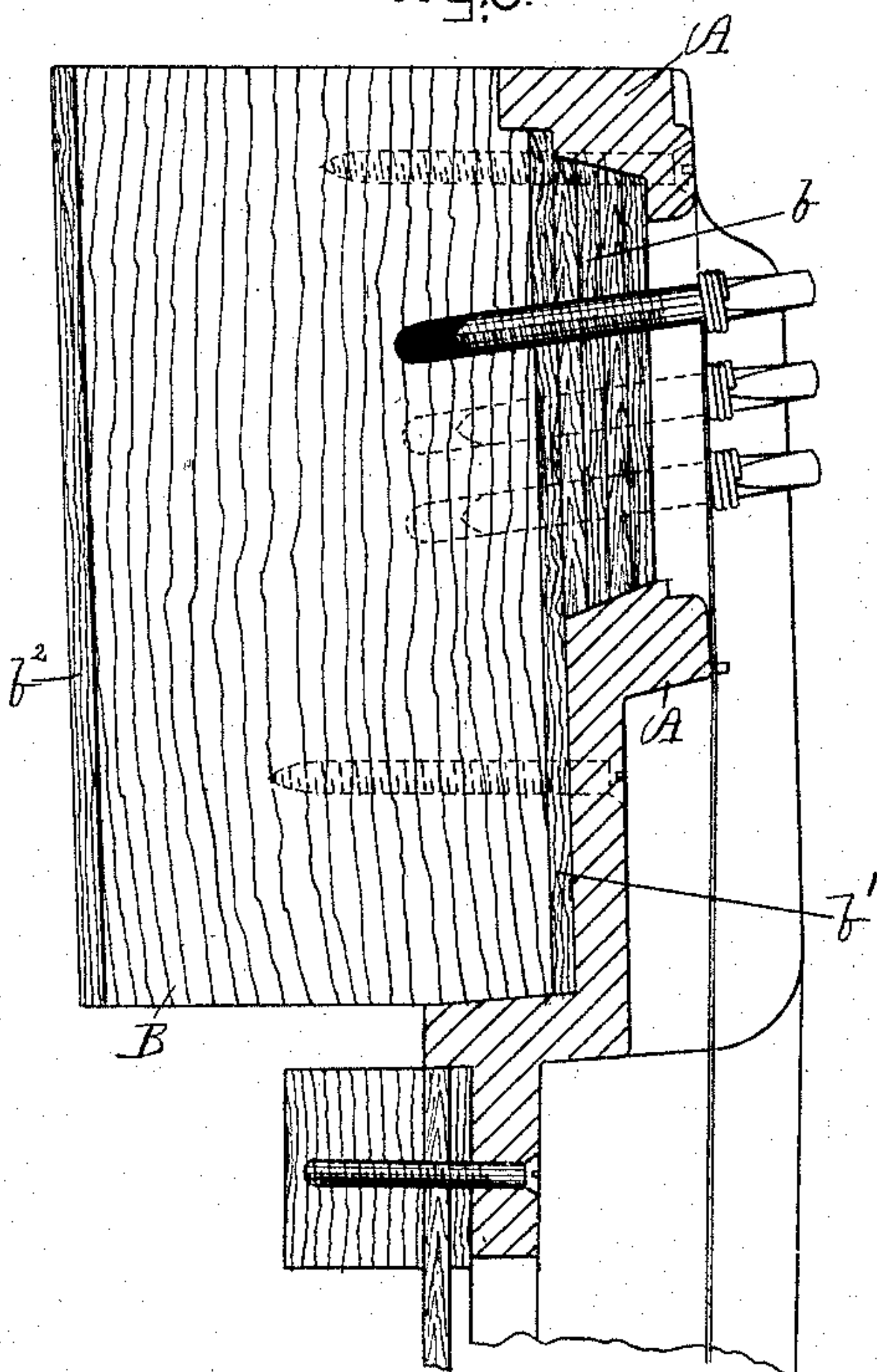
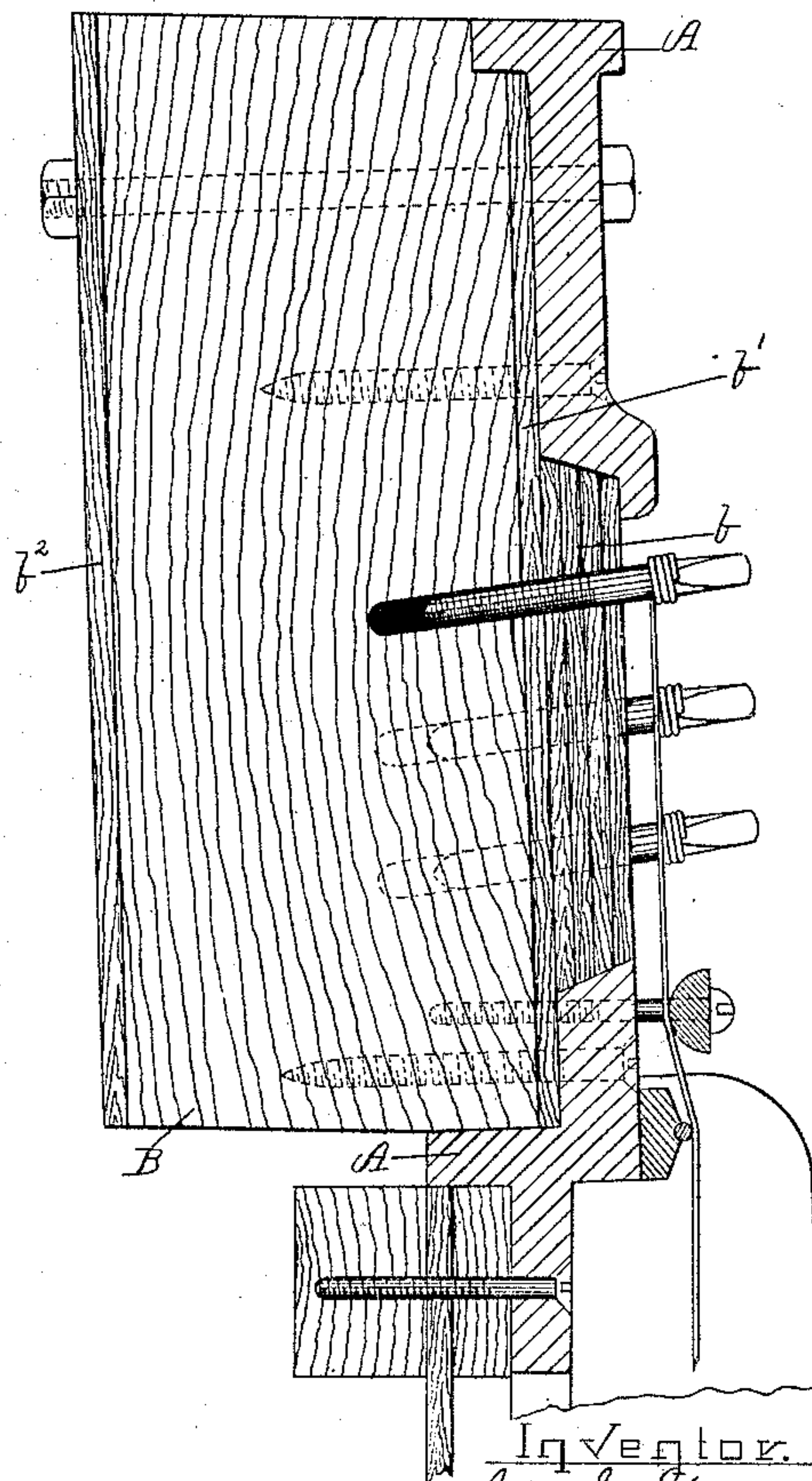


Fig. 2.



Witnesses.

*Ludwig W. Möller.*  
*John R. Snow.*

Inventor.

*Joseph Gramer,*  
*by his attorney,*  
*J. E. Macpherson*

# UNITED STATES PATENT OFFICE.

JOSEPH GRAMER, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF  
TO ORRIN A. KIMBALL, OF SAME PLACE.

## METALLIC FRAME FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 351,696, dated October 26, 1886.

Application filed December 7, 1885. Serial No. 181,933. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH GRAMER, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful  
5 Improvement in Metallic Frames for Pianos, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a frame embodying my invention. Fig. 2 is a section on  
10 line *x x*, Fig. 1, and Fig. 3 is a section on line *y y* of Fig. 1.

The "wrest-block," so called, is usually a timber with a number of veneers upon opposite  
15 sides, and receives the tuning-pins. These veneers are carefully applied to the wrest-block and are glued on. There are usually about five layers on that face of the wrest-block in which the tuning-pins are inserted.  
20 The object of these layers of veneering is to resist the very great strain on the pins; but while this is the best construction hitherto known, it is yet imperfect; and my invention consists in a novel construction of the metal  
25 frame, whereby the veneers of the wrest-block are held together with the utmost firmness, so that the tuning-pins are supported in a far better manner than heretofore attained.

In the drawings, A is the metal frame, re-  
30 cessed to receive the pin-block *b* of wrest-plank

B. In practice the innermost layer of veneers is, as shown, at *b'*; but that is a matter of mere choice. The veneers *b' b''* are usually glued to the wrest-plank B, and the veneers *b* form a pin-block, which is fitted to the frame A be-  
35 fore the pin-block *b* is secured to the wrest-plank B, so that when the wrest-plank is secured to the frame A, as by the screws and bolt, as in Fig. 1, the pin-block *b* is firmly  
40 clamped and held in the recess in the frame A.

I am aware of patents to A. H. Hastings, No. 241,212, May 10, 1881, and to P. Gmehlin, No. 254,209, February 28, 1882, and disclaim  
45 all that described in them, my invention differing materially from the inventions shown in the patents, in having the pin-block *b* and the frame A properly recessed to hold the pin-block in place.

What I claim is—

1. The frame A, formed with a recess, as  
50 shown, to receive a pin-block, *b*, projecting from the wrest-plank B, as set forth.

2. In combination, wrest-plank B, with its projecting pin-block *b*, and recessed frame A, substantially as set forth.

JOSEPH GRAMER.

Witnesses:

W. A. COPELAND,  
JOHN R. SNOW.