

(No Model.)

E. S. VOTEY.

KEY FRAME BRACE FOR REED ORGANS.

No. 305,724.

Patented Sept. 23, 1884.

Fig. 1.

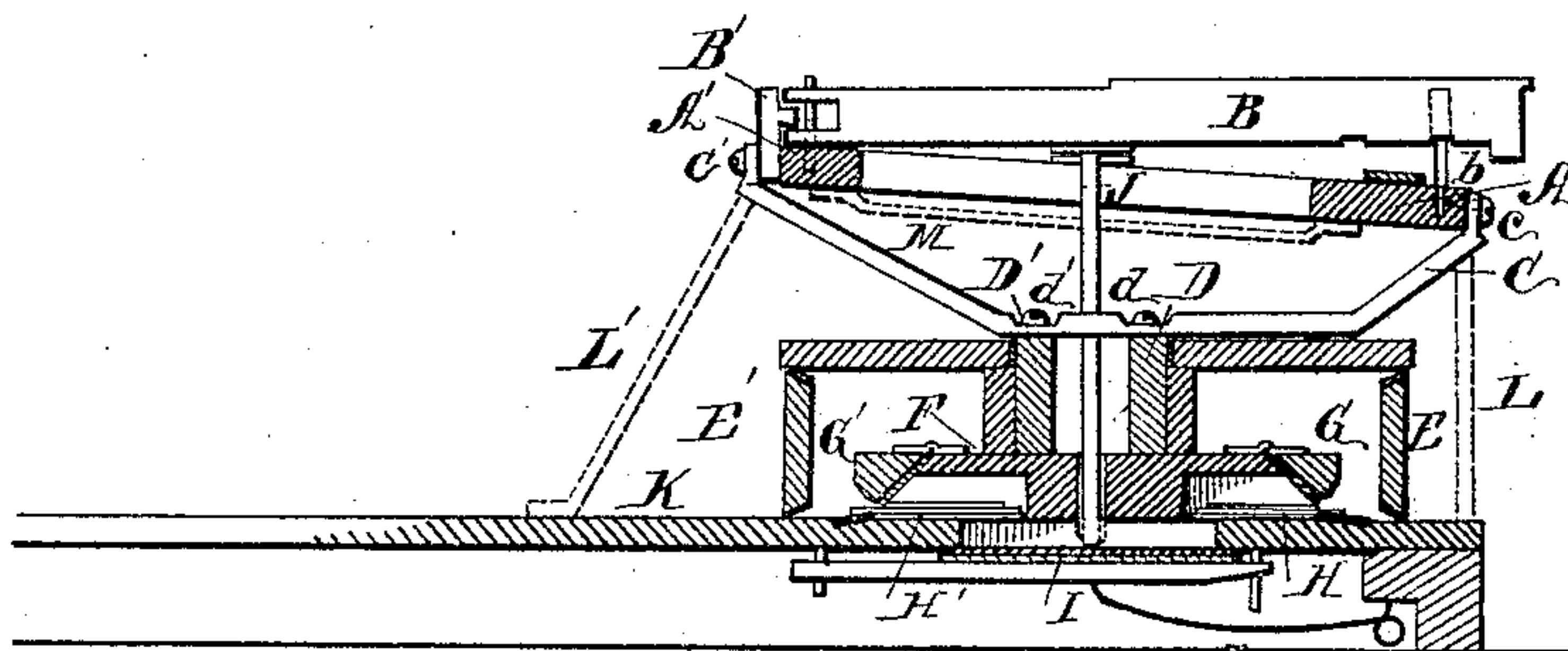
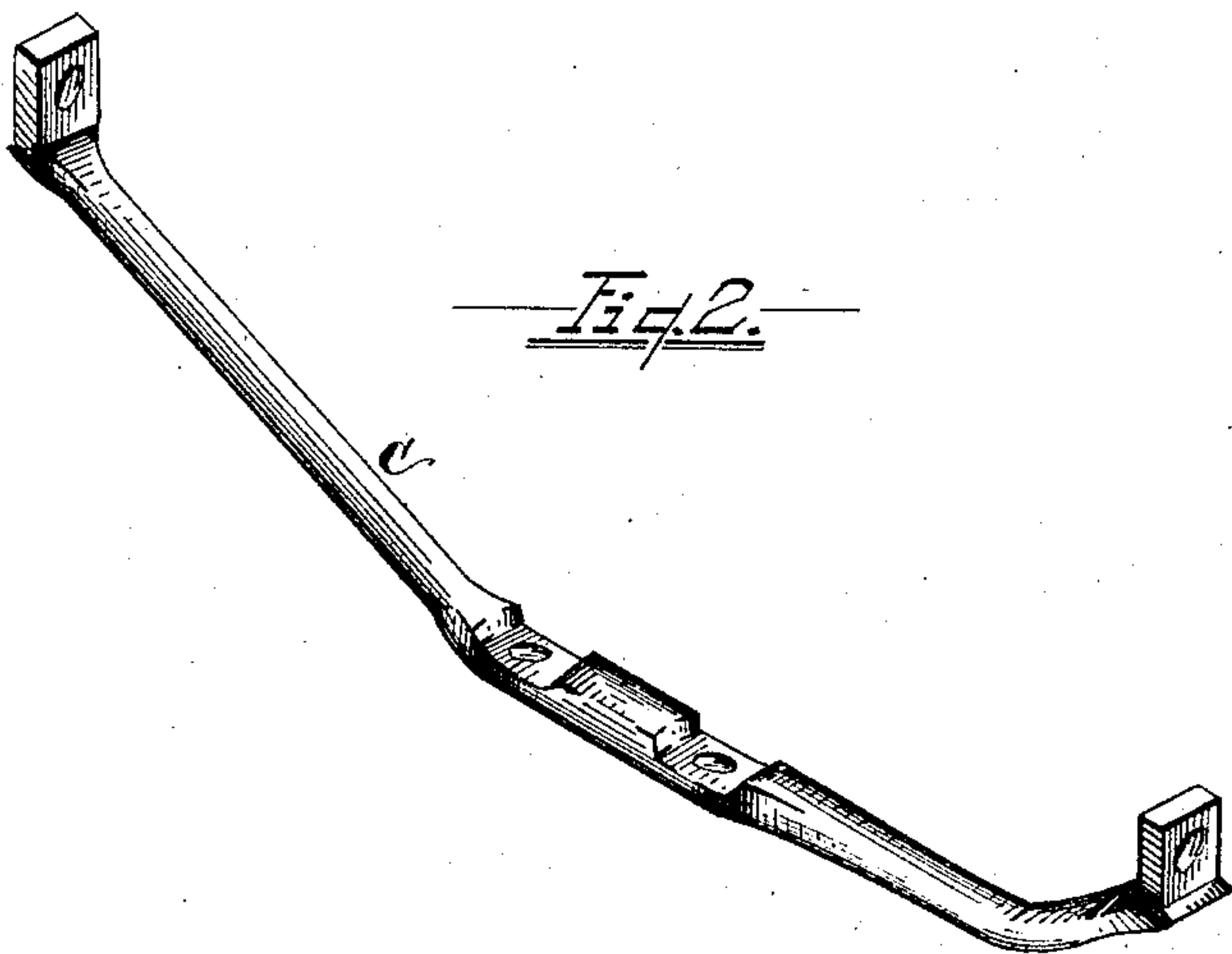


Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

EDWIN S. VOTEY, OF DETROIT, MICHIGAN, ASSIGNOR TO THE WHITNEY ORGAN COMPANY, OF SAME PLACE.

## KEY-FRAME BRACE FOR REED-ORGANS.

SPECIFICATION forming part of Letters Patent No. 305,724, dated September 23, 1884.

Application filed November 30, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN S. VOTEY, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Key-Frame Braces for Reed-Organs; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists of the combination of devices and appliances hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a vertical cross-section of a device embodying my invention. Fig. 2 is a separate view of one of the parts.

My invention relates to the manufacture of reed-organs, and has for its object more particularly the construction of the key-frame brace.

As illustrated in the drawings, A and A' represent the key-frame. B is the key. B' is the ordinary bar-support in the rear of the keys and key-frame. b is the key-pin.

C is my improved brace, preferably constructed of a single piece of wire, and bent so as to rest upon the back pieces of the swells or center strips, D and D', upon which it is secured intermediate of its ends, as shown at d and d', said ends being upturned so as to be properly connected with the key-frame in any suitable manner—as, for instance, by means of the screws c and c', the brace being constructed at its ends and intermediate thereof with suitable screw-sockets, whereby it may be secured to the frame and to said center strips, as shown. I prefer also to suitably flatten said brace at its ends and intermediate of its length adjacent to said sockets.

E represents the front swell, E' the back swell. F is the socket-board. G and G' are mutes. H and H' are the reeds. I is the valve. J is the operating-pin, by which the valve is opened when the key is depressed. K is the ordinary reed or vibrating board.

Heretofore it has been common to brace the key-frame by means of the front brace ex-

tended from the front part of the frame downward forward of the front swell, where it is properly secured upon the vibrating board, as illustrated in dotted lines at L. The frame was also braced in the rear by a back brace extending from the rear part of the frame downward upon the reed-board, as shown in dotted lines at L'; but the construction and location of the braces heretofore customary has interfered with the proper vibration of the vibrating board to a considerable extent. Both braces have also, as heretofore constructed and arranged, interfered with the taking out of the reeds when they would have to be tuned or repaired, and also with the taking out of the swells when necessary. By my improved key-brace these difficulties are avoided. Moreover, there has been heretofore a tendency of the key-frame to spread, causing the keys to bind or stick upon the pins, which has been commonly overcome by a connecting brace or tie extending from the front part of the frame to the rear portion of the same, as illustrated in Fig. 1 in dotted lines at M. This connecting-brace, however, has interfered with the center pin, J, which my improved key-frame brace also avoids, as it effectually overcomes any tendency of the frame to spread.

I prefer to construct this brace of a single piece, as described; but it is evident that it may be constructed in two parts, if desired, without departing from the principle of my invention.

I would have it understood that I do not limit myself to the construction of this brace from a single piece of wire, or to the particular shape of the brace shown, as it may be constructed of any suitable material and may be of any proper shape.

What I claim is—

1. A key-frame brace for a reed-organ, composed of the part C, formed, substantially as set forth, to be secured at its outer ends to the key-frame, and intermediate of its ends to a suitable support above the swells, substantially as described.

2. In a reed-organ, the combination, with the key-frame and the swells, of a brace for



the frame composed of the part C, formed with upwardly-extending arms, and secured at its outer ends to the key-frame, and intermediate of its ends to a suitable support above the  
5 swells, substantially as described.

3. A key-frame brace for a reed-organ, composed of the part C, formed with upwardly-extending arms, having their inner extremi-

ties at an angle thereto, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

EDWIN S. YOTBY.

Witnesses:

N. S. WRIGHT,

M. B. O'DOHERTY.