

A. G. BURTON.  
ATTACHING KEYS TO MELODEONS, &c.

No. 43,389.

Patented July 5, 1864.

Fig 1.

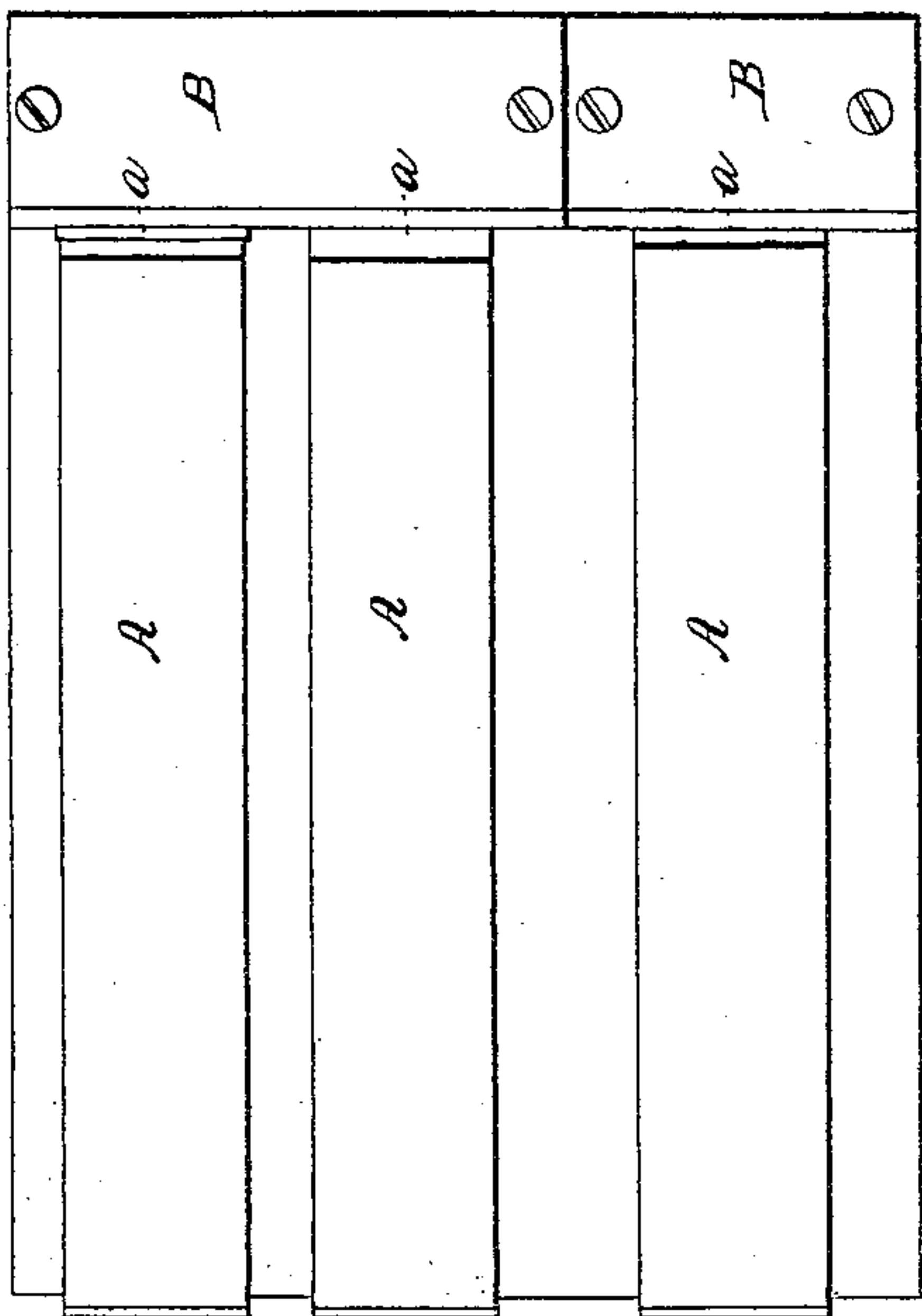


Fig 2.

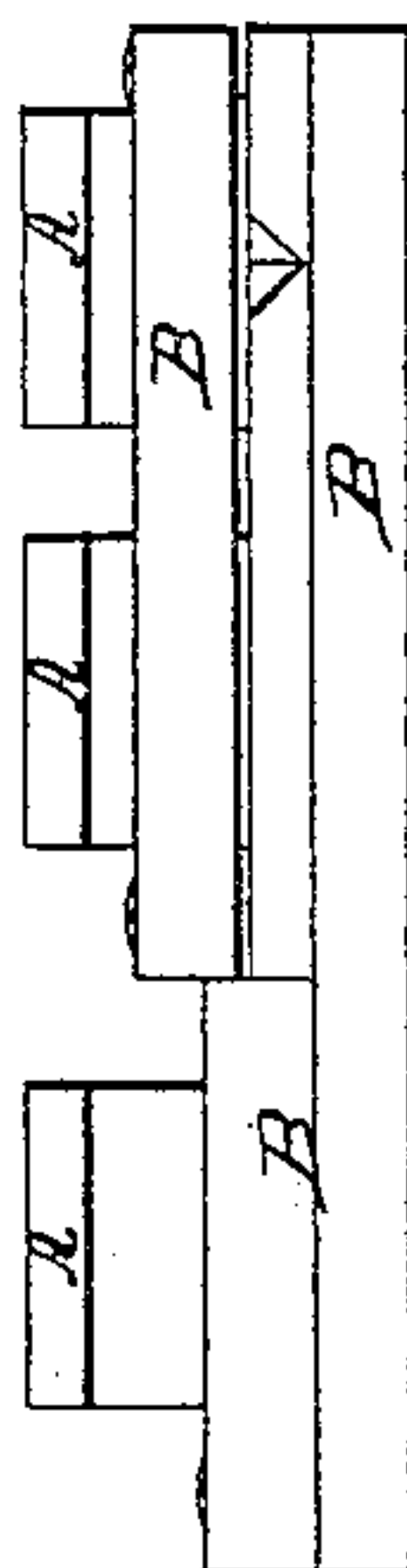


Fig 3.

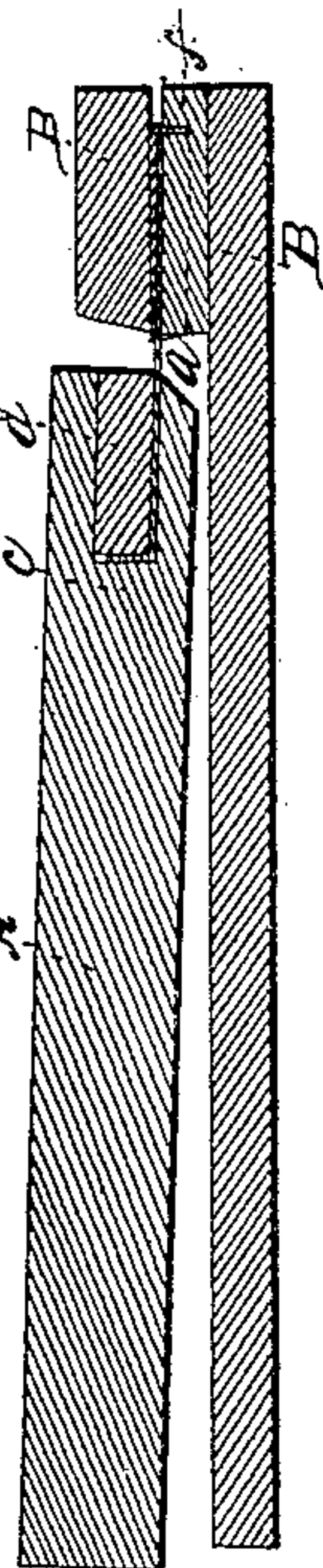


Fig 4.

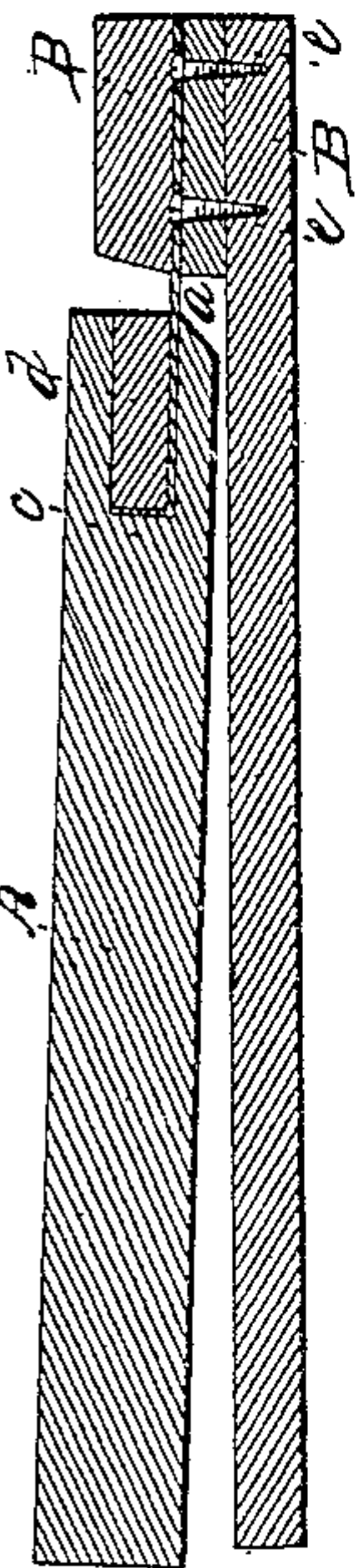
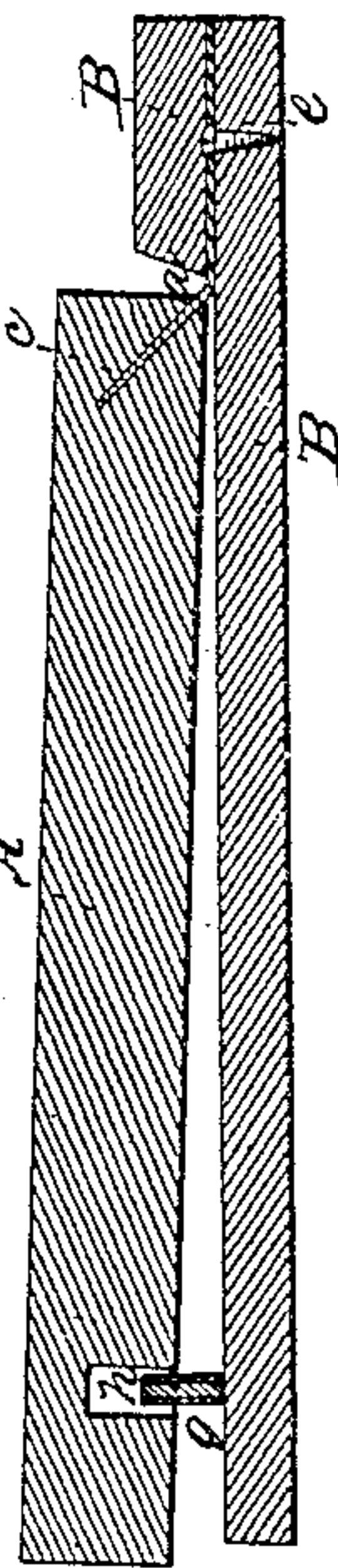


Fig 5.



Witnesses.

*J. D. Patten*  
*J. H. Hickman*

Inventor.  
*A. G. Burton*  
By atty *A. B. Wroughton.*



# UNITED STATES PATENT OFFICE.

A. G. BURTON, OF SHELBURNE FALLS, MASSACHUSETTS.

## IMPROVEMENT IN ATTACHING KEYS TO MELODEONS, &c.

Specification forming part of Letters Patent No. 43,389, dated July 5, 1864.

*To all whom it may concern:*

Be it known that I, A. G. BURTON, of Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented a new and useful Improvement in the Manner of Attaching the Keys to the Key-Boards of Melodeons and other Similar Instruments; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a top plan of a section of the keys and key-board of a melodeon. Fig. 2 represents a rear elevation thereof; and and Figs. 3, 4, 5 represent severally sections through the keys, and showing the mode of attachment to the key-board, all being modifications of the same general plan.

Similar letters of reference, where they occur in the separate figures, denote like parts in all of them.

The keys of melodeons heretofore have been almost universally connected to the key-board by a slot and pin, and these have been made to work quite loosely, so that the swelling of the wood would not cause them to bind; and because of this loose connection a guide-pin and hole had to be used at the opposite end of the key to prevent it from moving laterally, and thus touching the adjacent key. I am aware, however, that a flexible connection of cloth or leather has been used to unite the key to the key-board, but such an attachment is not sufficiently permanent or reliable, as it soon breaks or wears out.

My invention consists in connecting the key to the key-board by a spring made of thin metal, wood, bone, or hard rubber, or any other equivalent hard and elastic material.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A A A represent three keys of any of the ordinary kind used on melodeons or other similar wind-instruments, and though shown separated, for the sake of illustration, may be arranged in close juxtaposition to each other, as in the common way.

B is the key-board, made in any of the well-known ways, and the keys A are connected thereto by thin brass or other suitably elastic springs *a*. The spring *a* may be varied in

form or material, as well as in its mode of attachment to the key and key-board B without changing the character of the invention—as, for instance, in Fig. 3 the spring is connected to the key by a turned-up flange, *c*, which enters an open mortise made in the end of the key, and when the spring is in place a block or plug, *d*, of wood or any other material, closes up the mortise and holds that end of the spring tightly and firmly in place. The other end of the spring may be held to the key-board by the flanges *f*, which are forced into saw kerfs or cuts, to hold it firmly there.

In Fig. 4 I have shown the key board end of the spring as held by screws or nails *e*, the fastening at the other end being the same as in Fig. 3.

In Fig. 5 the key is secured to the spring by an oblique saw-kerf, into which the bent-up end of the spring may be forced, as therein shown; and said spring may be held to the key-board by a single screw or nail, in which case a guide-pin, *g*, and slot or hole *h* should be used to prevent the key from moving laterally and interfering with the next adjacent key; but I prefer to dispense with the guide-pin and slot *g h*, as they are subject to the same difficulty of swelling of the wood as when used to fasten the key to the key-board; and my mode of attachment of key and key-board can be so made as to prevent any lateral motion of the key, and hence dispense with the guide-pin and hole. This attachment *a*, by its elastic nature, will sustain a portion of the weight of the key, and to this extent may aid the spring that works the valve and raise the key after the pressure has been removed from it, and the spring, instead of being made as above stated, may have that end of it which is attached to the key-board formed into a cylindrical shape or bent around, so as to fit into a round or semi-round hole.

Having thus fully described the object and purpose of my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

Uniting the keys of melodeons to the key-board by means of springs, substantially as and for the purpose set forth.

A. G. BURTON.

Witnesses:

E. B. WILLIAMS,  
WM. SHERWIN.