

(No Model.)

L. K. FULLER.
Organ-Bellows.

No. 228,053.

Patented May 25, 1880.

Fig. 1.

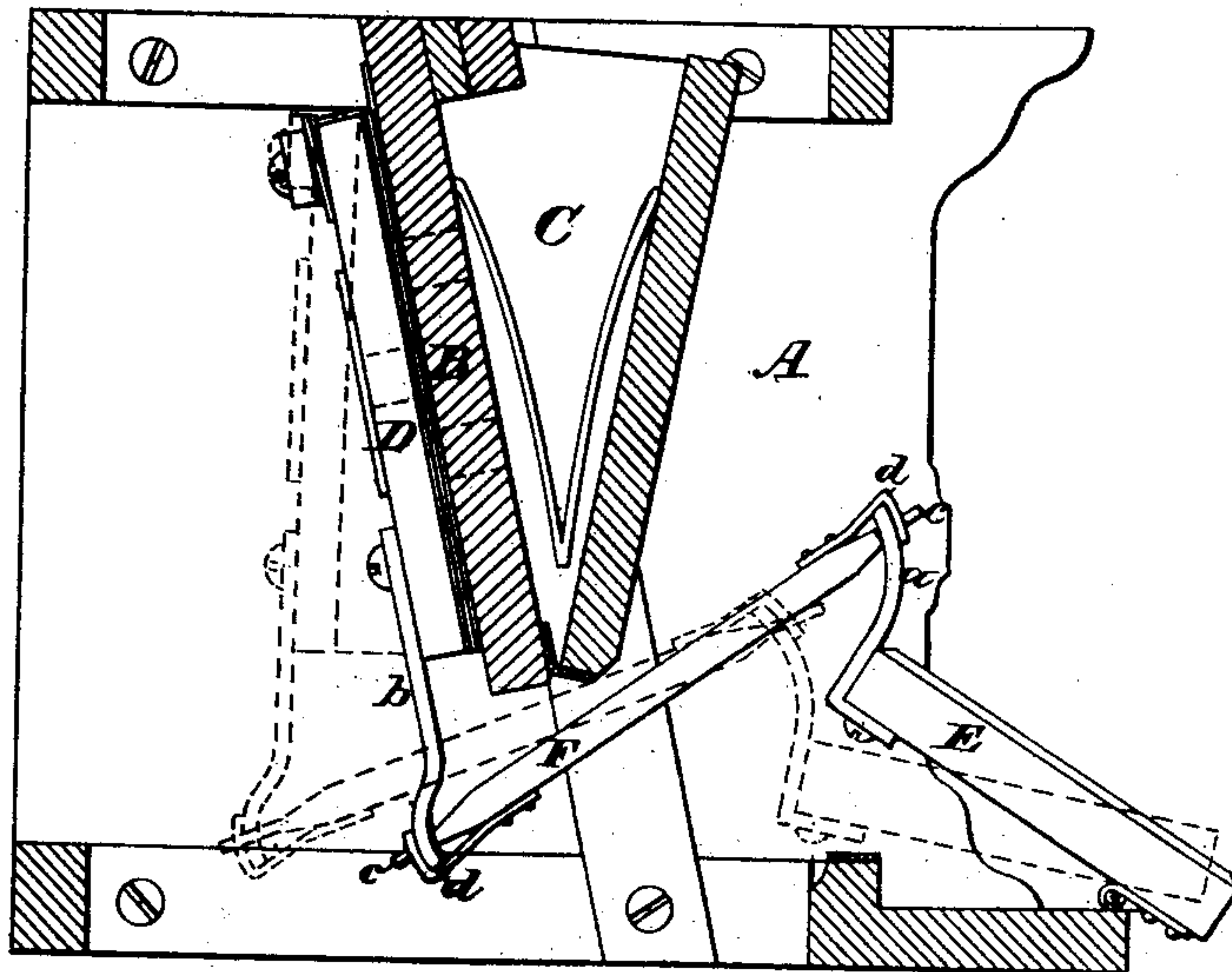


Fig. 2.

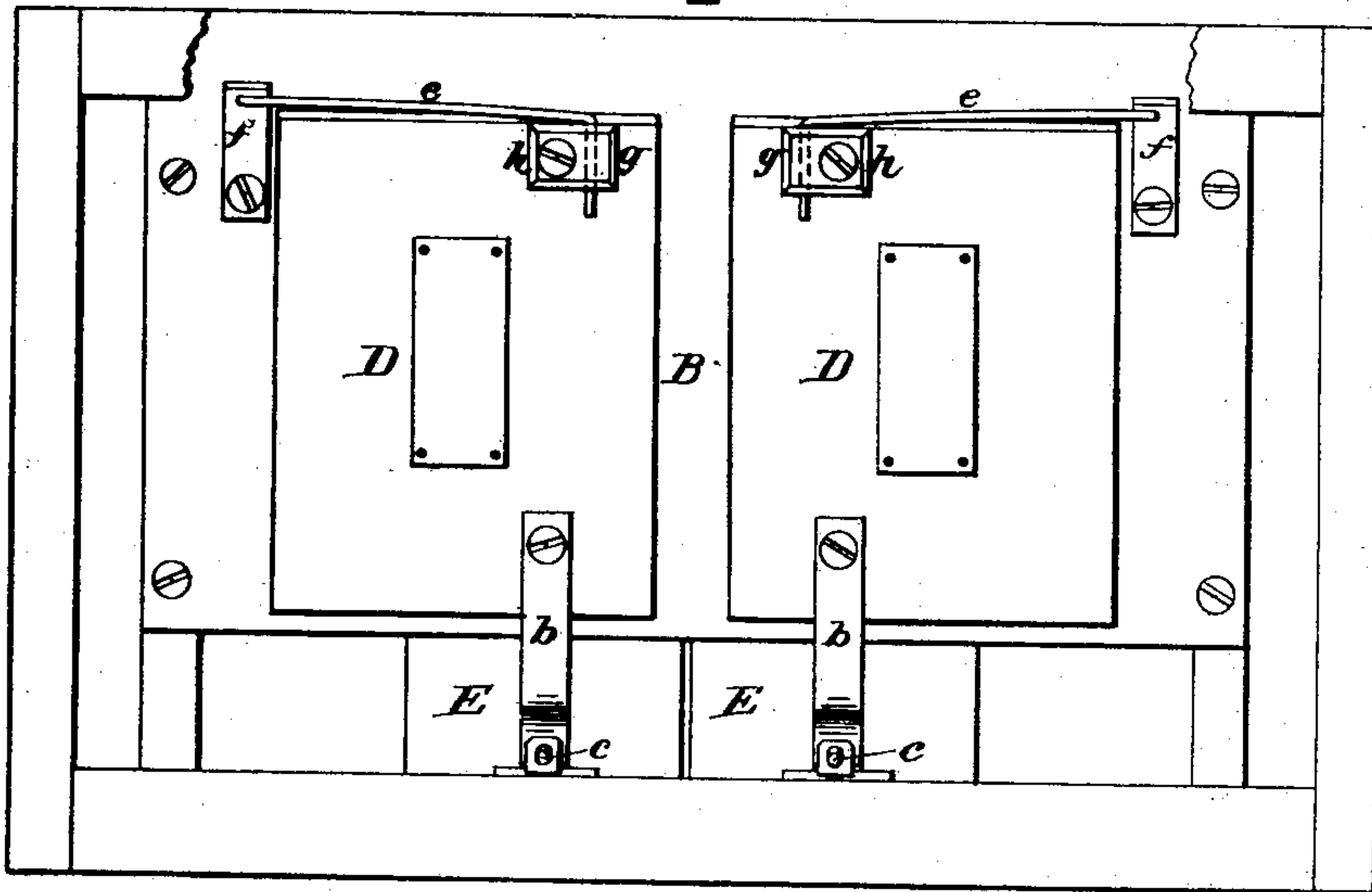
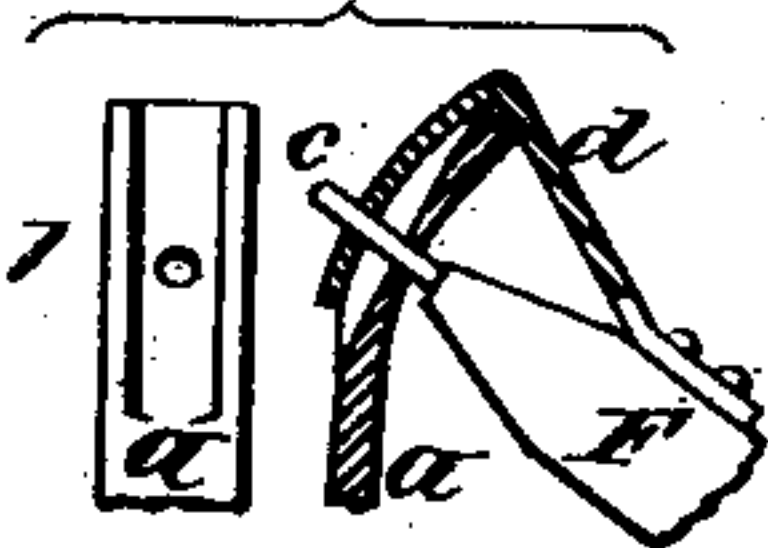


Fig. 3.



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UNITED STATES PATENT OFFICE.

LEVI K. FULLER, OF BRATTLEBOROUGH, VERMONT, ASSIGNOR TO J. ESTEY & CO., OF SAME PLACE.

ORGAN-BELLOWS.

SPECIFICATION forming part of Letters Patent No. 228,053, dated May 25, 1880.

Application filed March 4, 1880. (No model.)

To all whom it may concern:

Be it known that I, LEVI K. FULLER, of Brattleborough, in the county of Windham and State of Vermont, have invented certain Improvements in Bellows for Reed-Organs, of which the following is a specification.

This invention relates to mechanisms for operating the bellows or pumbers of a reed-organ from the pedal.

In the drawings which serve to illustrate my invention, Figure 1 is a transverse vertical section through the lower portion of an organ-case and the bellows mechanism therein provided with my improvements. Fig. 2 is a rear view of the same, showing the pumbers and their operative mechanism. Fig. 3 shows detached and enlarged views of the operative mechanism.

Let A represent an ordinary reed-organ case; B, a perforated and fixed partition; C, a receiver, and D D pumbers. In the ordinary method of arranging these parts the receiver is placed at the back and hinged at its upper edge, and the pumbers at the front and hinged at their lower edges, the latter being connected with pedals by straps or belts arranged to pass over guide-pulleys.

For convenience in arranging my novel mechanism for operating the pumbers, I reverse the above-described arrangement, placing the pumbers at the back and hinging them at their upper edges.

As there are two pedals, E E, and two pumbers, D D, and the mechanisms for connecting the pumbers with the pedals are identical, it will only be necessary to describe one.

The pedal E is provided with a lug or bracket, *a*, and the pumber D with a similar lug, *b*, and these are perforated to receive and provide bearings for pins *c c* on the ends of a connecting link-bar, F. The pins are not liable to escape from their bearings in the brackets; but to prevent the possibility of their doing so I provide a flap, *d*, of leather or other similar flexible material, which is secured to the bar F at one end, passes over the end of the lug, and is perforated to slip snugly over the end of the pin *c*.

The pumbers are arranged to be collapsed

by means of torsion-springs *e e*. One end of the spring is fixed at *f* and the other end is bent at an angle and caused to take under the overhanging end *g* of a cleat, *h*.

When the pedal E is depressed with the foot the movement of its free end is communicated, through the rod F, which is rigid, to the pumber D, which is accordingly expanded. When the foot is removed from the pedal the torsional spring *e* collapses the pumber and elevates the pedal.

To permit the pin *c* to oscillate freely in the hole in the bracket, I make the latter thin at that point (see Fig. 3) and cut or bevel away the end of the bar F, as shown.

The flap *d*, being flexible, prevents the bracket from slipping off the pin when any strain is brought upon it, (as by lifting the pedal above its normal altitude,) as the breaking of the flap over the prolonged end of the bracket tends rather to pull the flap in two than to slip it off the pin.

The dotted lines in Fig. 1 show the position of the parts when the pedal is depressed.

My invention does not comprise the arrangement of the pumber and bellows as shown, nor, broadly, the connection of the pedal with the pumber by means of a rigid bar; but,

Having thus described my invention, what I claim as new is—

1. In an organ-treadle, the combination of the bar F, provided with a pin, *c*, and the perforated lug or bracket, substantially as shown.

2. The combination of the pedal E, pumber D, lugs or brackets *a b*, bar F, and pins *c c*, substantially as and for the purposes set forth.

3. The combination of the pumber D, provided with the spring *e*, cleat *h*, and bracket *b*, with the bar F, provided with pins *c c* and flaps *d d*, and the pedal E, provided with the bracket *a*, all arranged substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

LEVI K. FULLER.

Witnesses:

L. W. HAWLEY,
W. S. UNDERWOOD.