

(No Model.)

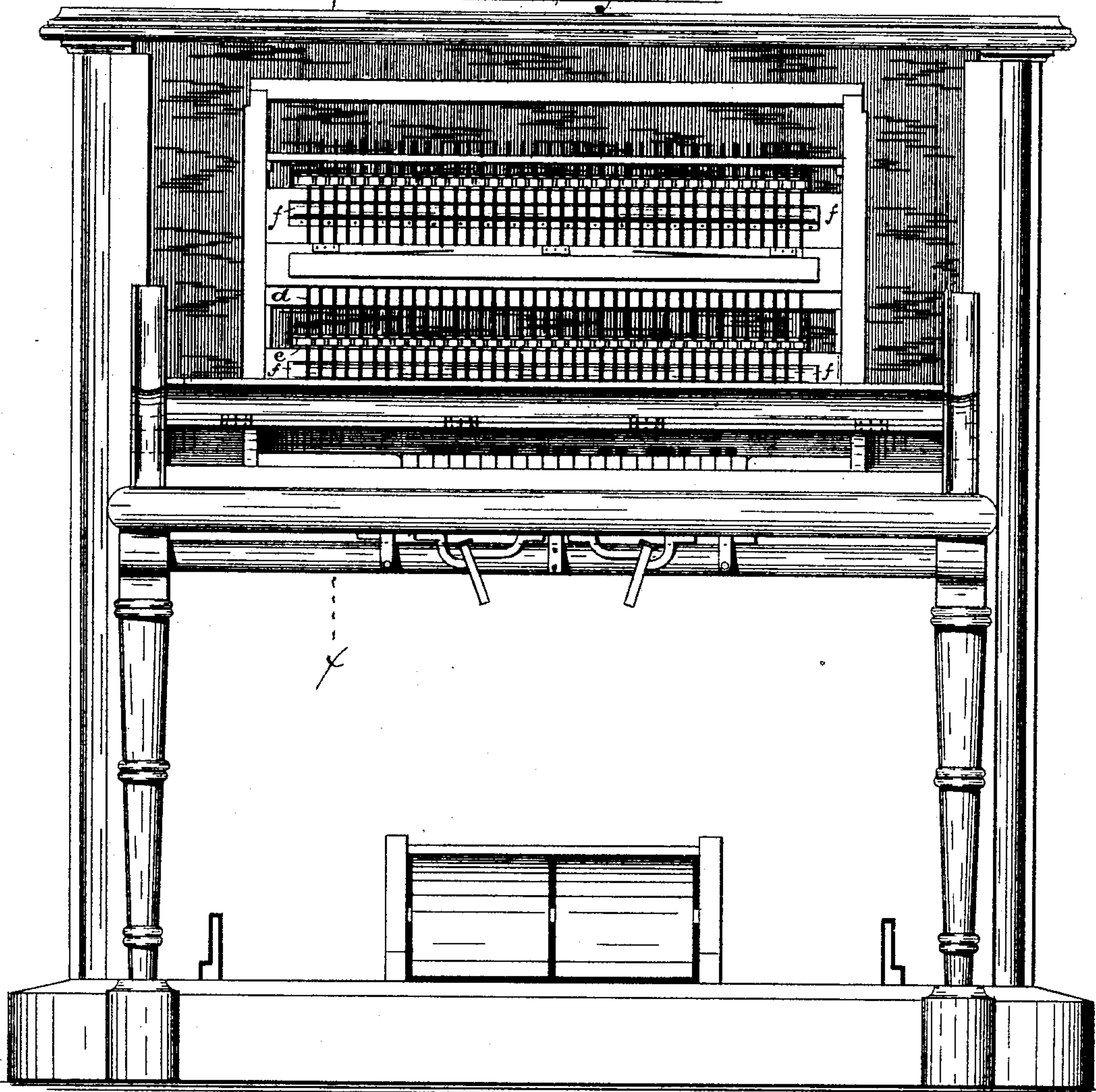
2 Sheets—Sheet 1.

M. D. VAN WINKLE.
ORGAN.

No. 464,270.

Patented Dec. 1, 1891.

Fig. 1.



Witnesses

Inventor:

Oscar A. Michel.

Moses D. Van Winkle,

L. H. Mulford

By Drake & Co. Attys.

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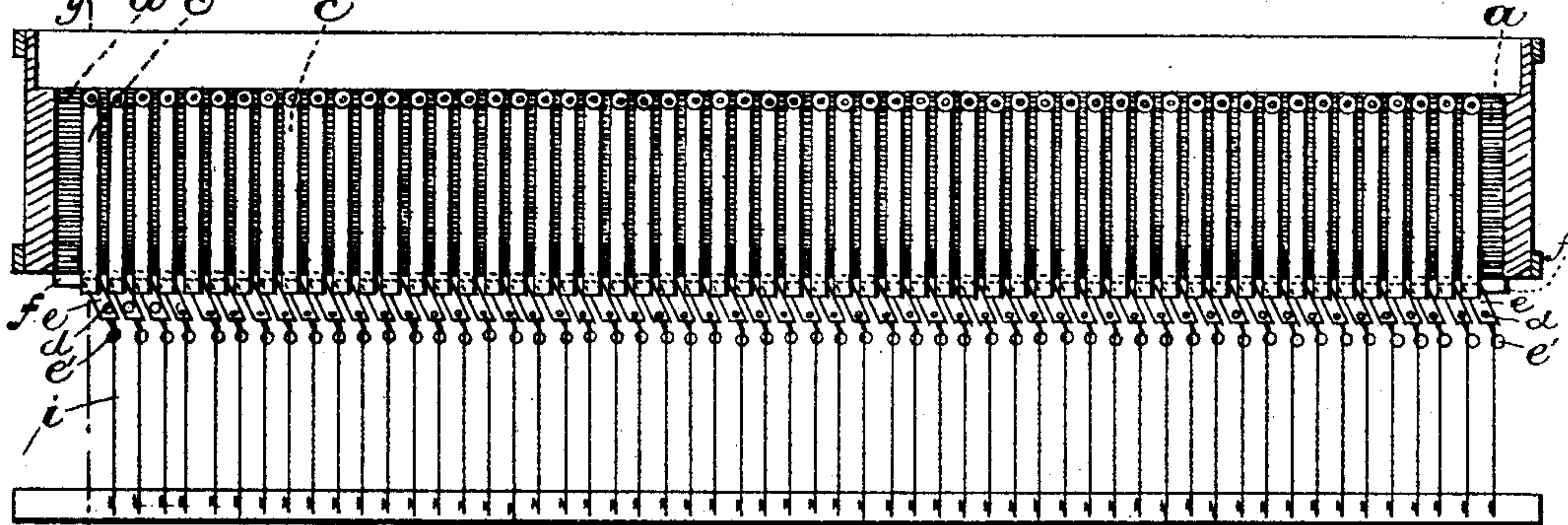


Fig. 2.

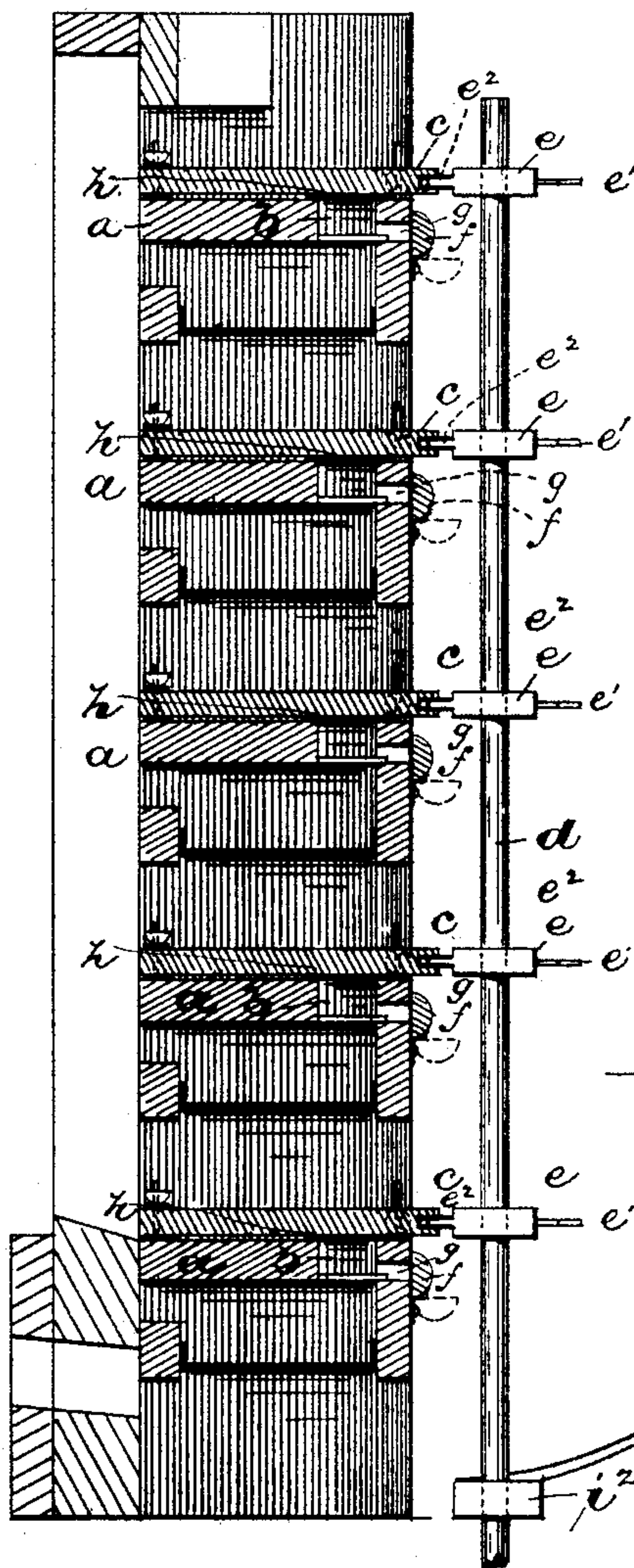


Fig. 3.

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UNITED STATES PATENT OFFICE.

MOSES D. VAN WINKLE, OF BLOOMFIELD, NEW JERSEY.

ORGAN.

SPECIFICATION forming part of Letters Patent No. 464,270, dated December 1, 1891.

Application filed January 12, 1891. Serial No. 377,422. (No model.)

To all whom it may concern:

Be it known that I, MOSES D. VAN WINKLE, a citizen of the United States, residing at Bloomfield, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Organs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide an action which shall not be deleteriously affected by changes which take place in respect to the humidity and temperature of the atmosphere, but which shall work freely and promptly, regardless of those conditions, and to secure other advantages hereinafter specified.

The invention consists in the improved organ-action and in the combination and arrangement of the several parts thereof, as herein set forth, and finally pointed out in the claims.

Referring to the accompanying drawings, in which similar characters or letters of reference indicate corresponding parts in each of the several figures where they occur, Figure 1 represents in front elevation a parlor-organ, the keys and the action being exposed, embodying my improvement; and Fig. 2 is a horizontal transverse section taken through line *x* of the same. Fig. 3 is a vertical transverse section taken through line *y* of Fig. 2.

In said drawings, *a* indicates the reed-boards; *b* the ports therein, which communicate with the reeds and through which the air escapes when the keys are being manipulated.

c indicates the pallets, which are hinged or fulcrumed at or near the back edge of the reed-boards.

d indicates the lifting-rods arranged in front of the reed-boards and carrying lifters *e*, which connect with said pallets, and *f* indicates cushioned or lined covers, which are hinged to the reed-boards and cover the openings *g*, through which the reeds are inserted and removed when necessary. When this operation is being performed, the covers are opened, as

indicated by dotted lines in Fig 3, and when it is completed and the covers released they close automatically by a spring action, as will be understood. The said cushions or linings intervening between the covers and the reed-boards may or may not be fastened to said covers and may work either with or independent of them, as may be preferred.

The ports or air-escapes *b* are made in the top of the reed-boards instead of in the front thereof, as heretofore, and are covered by the pallets *c*, which are each provided with a cushioned or flexible valve *h*, which is considerably larger diametrically than the said ports and extends beyond the limits thereof, whereby any expansion or contraction which may take place in the pallets or reed-boards, owing to the varying conditions of the atmosphere, will not cause the valves to leak by the uncovering of the ports *b*, as is frequently the case with ordinary organs.

The pallets *c*, owing to the relative location of the ports, lie directly upon the top of the latter, which are thereby kept closed by the force of gravitation upon the pallets, as well as by the action of a spring *i*, secured to the organ-case and engaging with said lifting-rods, as shown in Fig. 3. The pallets being hinged or fulcrumed at or near the back edge of the reed-board, as stated, are, owing also to their length and to the location of the lifters, easily lifted, as will be obvious. The said lifters *e* are adjustable upon the lifting-rod *d*, and are held in position thereon by means of set-screws *e'*, and engage with the pallets by means of a cushioned tenon *e''*, which enters a corresponding slot or groove in the end of said pallets, as will be understood upon reference to Figs. 2 and 3.

By means of these improvements I am enabled to effect a considerable saving in the cost of manufacture as well as in the expense of repairing, which are greatly reduced in consequence thereof.

Having thus described my invention, what I claim as new, and desire to have secured by Letters Patent of the United States, is—

1. An organ-action combining therein a reed-board having the air-escape ports *b* in the top thereof, pallets *c*, provided with cushioned or elastic valves diametrically larger than said ports, a lifting-rod carrying adjust-

able lifters which connect with said pallets, a spring engaging with said lifting-rod, the normal tendency of which is to press the pallets upon the reed-board, and a hinged cover
5 to close the openings in the front of the reed-boards, substantially as and for the purposes set forth.

2. In an organ-action, the combination, with
10 pallets hinged or fulcrumed at the back edge of the reed-board, of lifting-rods arranged in front of the reed-boards, adjustable lifters carried by said lifting-rods and engaging with said pallets, and springs secured to the organ-
15 case and engaging with the lifting-rods afore-said, as described, for the purposes set forth.

3. In an organ-action, the combination, with the reed-board having the ports *b* in the top

and the openings *g* in the front thereof, of the pallets *c*, covering said ports *b*, and the hinged covers *f*, covering said openings *g*, as described, 20
for the purposes set forth.

4. In an organ-action, the combination of a reed-board having the openings in the front thereof to admit of the insertion and with-
drawal of the reeds, and the hinged covers *f*, 25
arranged to operate in connection therewith, as described, and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of October, 1890.

MOSES D. VAN WINKLE.

Witnesses:

OSCAR A. MICHEL,

OLIVER DRAKE.