

(No Model.)

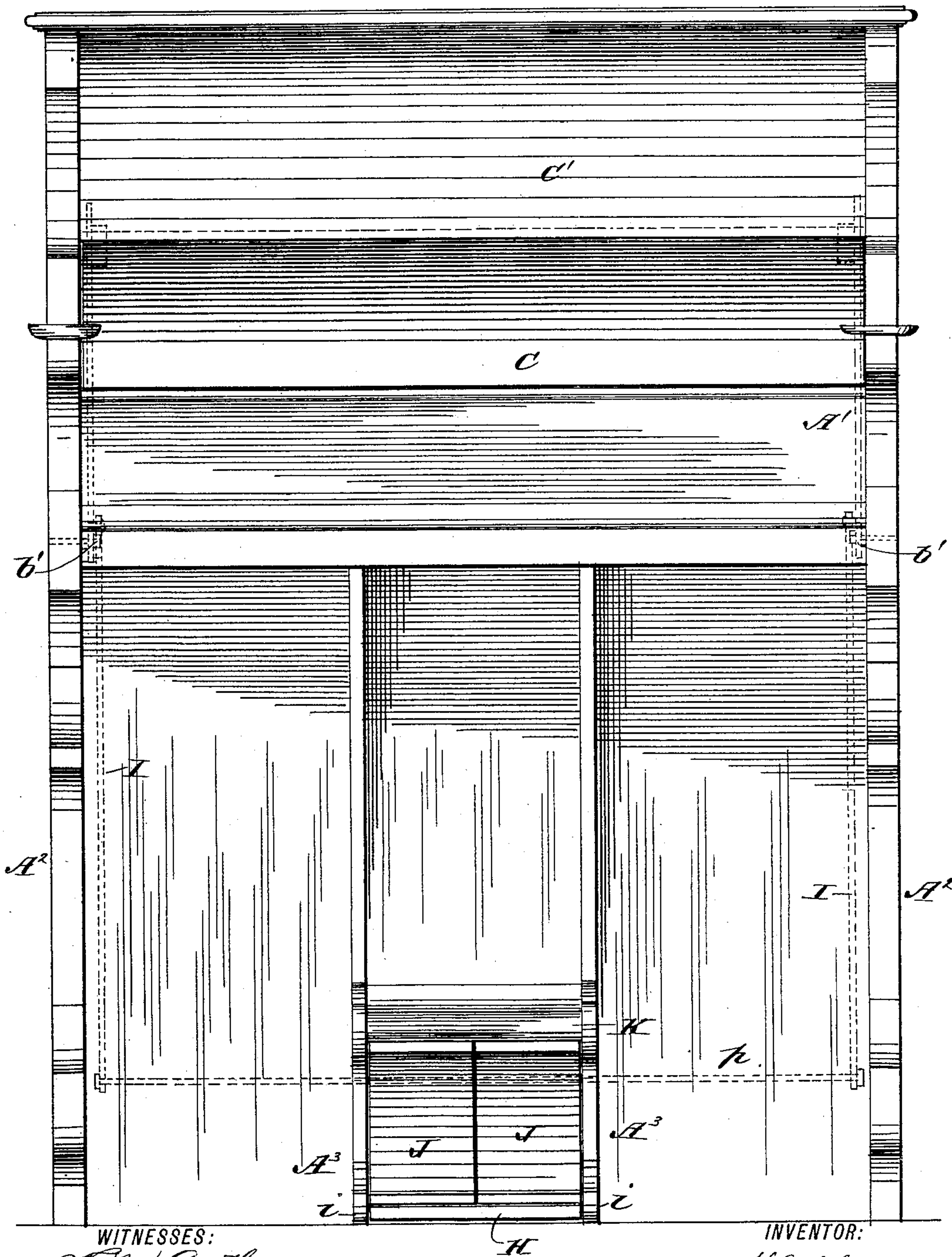
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H. E. CHUTE.
ORGAN CASE:

No. 416,993.

Patented Dec. 10, 1889.

Fig. 1.



WITNESSES:

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(No Model.)

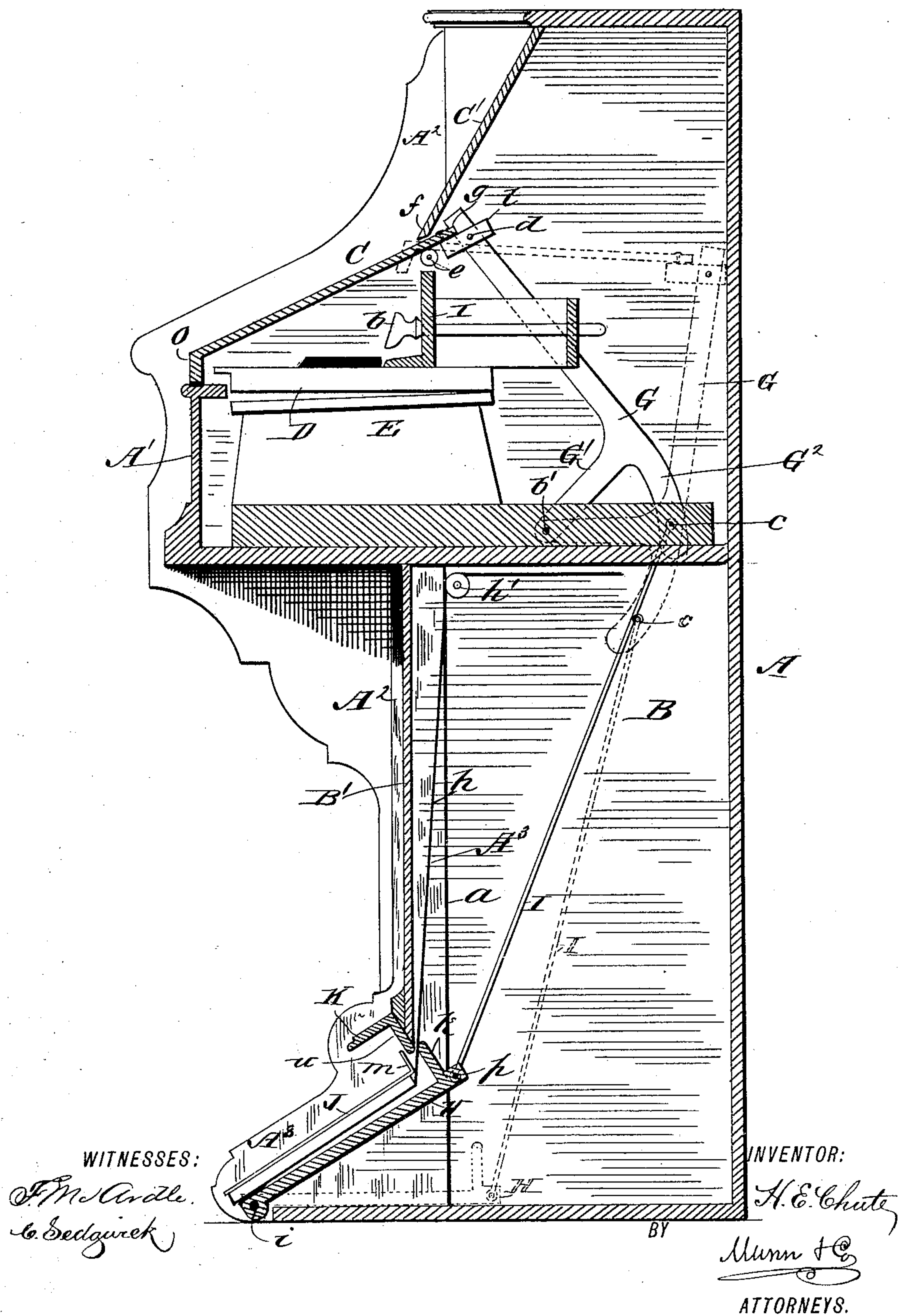
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Fig. 2



UNITED STATES PATENT OFFICE.

HIRAM E. CHUTE, OF YARMOUTH, NOVA SCOTIA, CANADA.

ORGAN-CASE.

SPECIFICATION forming part of Letters Patent No. 416,993, dated December 10, 1889.

Application filed September 4, 1889. Serial No. 322,940. (No model.)

To all whom it may concern:

Be it known that I, HIRAM E. CHUTE, of Yarmouth, in the county of Yarmouth, Province of Nova Scotia, Dominion of Canada, have invented a new and useful Improvement in Organs, of which the following is a full, clear, and exact description.

My invention relates to an improvement in organs, one object of my invention being to provide an organ-casing with a fall-board or key-board cover, which may be opened by the depression of the pedals in a noiseless and easy manner without interference with the other parts of the organ.

A further object is to furnish an organ with means for the automatic closure of cracks around the pedals when the fall-board is closed, whereby dust and vermin—such as mice, roaches, or spiders—are excluded from the interior of the instrument.

With the objects mentioned in view my invention consists in certain features of construction and combinations of parts, which will be specifically described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a front elevation, and Fig. 2 a side elevation, of an organ-casing in section, exposing certain interior parts common to well-constructed organs, and my improvements combined with the casing, so as to avoid interference with the organ mechanism.

A is the casing; A', the front board opposite the key-board; B, the bellows-chamber, the bellows being removed; E, the key-board; D, the key-bank; b, the swell-action pull-button, and C' the upper fixed front of the organ-casing.

The parts named are such as are found in well-constructed organs of any make, and are here shown to render the construction and relative position of novel features of my invention more readily comprehended.

The fixed upper front piece C' of the organ-casing A is inclined, so as to project its lower edge *f* outwardly a proper distance. The vertical wall I, against which the keys D impinge when in normal position, is of such a relative height that a throat between its upper edge

and the adjacent lower edge of the front piece C' is produced.

A cylindrical roller *e* is preferably journaled in each side of the organ-casing within the throat just mentioned, which roller is of such diameter as to allow space above it for the sliding introduction of the fall-board C.

As will be seen, the fall-board consists of a piece of material—preferably hard-wood board—finished to suit the style of the organ-casing and proportioned in thickness throughout its area, so as to permit it to slide over the roller *e* close to the edge of the front piece C'.

When the fall-board C is located as shown in full lines in the drawings, its forward depending piece *o* will rest on the upper edge of the fixed front board A', and the rear portion near the adjacent rear edge will have support on the roller *e*, so that a neat close finish is provided for the sliding fall-board.

Two pedals J, as usual, are employed to operate the bellows, and are shown in position in Fig. 1.

At equal distance from the vertical sides A² of the casing A two pedal-brackets A³ are secured, which have their rear edges *a* extended inwardly beyond the front wall B', as shown in Fig. 2. The pedals J are hinged at their lower front edges upon the rocking board H, which latter is extended across the space between the brackets A³ and adapted to vibrate by its pivotal connection *i* therewith produced near the lower front edge of the board. From the connection made between the pedals and rocking board they will move upwardly together on the fulcrum-bolt *i*, and the board can be depressed by a pressure on either pedal. A low wall *k* projects upwardly from the rear edge of the board H at a right angle thereto, and corresponding flanges *m* are formed on the rear edges of the pedals to afford toe-rests for the feet of the performer.

Near the rear edge of the rocking board H, that projects beyond the rear vertical edges *a* of the pedal-brackets A³, a transverse bar *p* is secured, which projects from each side of the board H toward the casing so as to nearly touch its sides, for a purpose which will be explained.

An angle-board K extends across from one

pedal-bracket to the other, and by reason of the position it is given the depending portion *u* of the same is adapted to meet the upturned wall *k*, that projects from the hinged piece H, thus closing up the opening provided for the pedals, or either of them, to move in.

A strap or other suitable connection *h* is affixed to the rear edge of the pedals J, which strap extends upwardly between the depending flange *u* of the angle-board K and the upturned wall *k* to the top portion of the bellows-chamber B, passing over the pulley *h'*, and thence rearwardly to be attached to the bellows when the latter is in position for such connection.

At each side of the organ-casing a bell-crank lever G is pivoted to the sides, said pivoted connections being effected near the ends of the limbs G' at *b'*. The lower ends of the bell-crank limbs G² are connected to the bar which extends from *p*, the hinged piece H by the connecting-rods I, which rods are pivoted at one end to the latter-named piece, and by their upper extremities to the limbs G² at *c*, so that a depression of the pedals J, which correspondingly lowers the hinged piece H, will rock the levers G toward the rear side of the casing A and cause them to assume an upright position, as shown in dotted lines. A hinged connection of the fall-board C to the upper ends of the lever G is formed by pivoting a block *t* on each lever, as at *d*, the projecting portions of these blocks being secured at *g* to the fall-board, as shown.

In operation it is apparent that a depression of the pedals J will press the hinged piece H downwardly and rock the levers G rearwardly, which movement slides the fall-board over the roller *e* until it assumes the position shown in dotted lines.

When the instrument is to be closed, the operator grasps the depending piece *o* of the fall-board C and draws the latter forwardly, its weight causing it readily to assume the position shown in full lines.

Upon closure of the organ, as stated, the close contact of all movable parts of the pedal-action prevents the ingress of mice, dust, or insects.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a casing and a pedal, of a hinged piece that is depressed by the pedal, a bell-crank lever, a connecting-rod, and a fall-board, substantially as set forth.

2. The combination, with a casing, a pedal, and an angle-board affixed to the casing above the pedal, of a hinged piece which is depressed by the pedal, a connecting-rod, a bell-crank, and a fall-board, substantially as set forth.

3. The combination, with a casing, a pedal, and an angle-board affixed to the casing above the pedal, of a hinged piece which is depressed by the pedal, a connecting-rod, a bell-crank, a roller, and a fall-board, substantially as set forth.

4. The combination, with a casing, a pedal hinged to a piece having a projecting wall, and an angle-piece which is adapted to be met by the wall of the hinged piece, of a connecting-rod, a bell-crank, a roller, and a fall-board, substantially as set forth.

5. The combination, with a casing, a pedal, an angle-piece, and a hinged piece having a projecting wall which impinges on the depending portion of the angle-piece when rocked upwardly, of a connecting-rod, a bell-crank lever, a roller, and a fall-board hinged to the bell-crank lever so that the fall-board will be moved rearwardly over the roller when the pedal is depressed, substantially as set forth.

6. The combination, with a casing, an angle-piece one portion of which projects downward, and a hinged piece having an upwardly-projecting wall that touches the angle-piece when rocked upward and presses against the strap *h*, of a pedal-piece having hinged engagement with the hinged rocking piece, a connecting-rod that is pivoted on one end of a transverse bar affixed to the rear portion of the hinged piece and also to a pivoted bell-crank, a bell-crank lever, a transverse roller, and a fall-board which is adapted to slide on the roller and is hinged to the upper end of the bell-crank lever, substantially as set forth.

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Witnesses:

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J. W. GRANT.