

(Model.)

2 Sheets—Sheet 1.

E. P. PIERCE.
AWNING BLIND HINGE.

No. 252,895.

Patented Jan. 31, 1882.

Fig. 1.

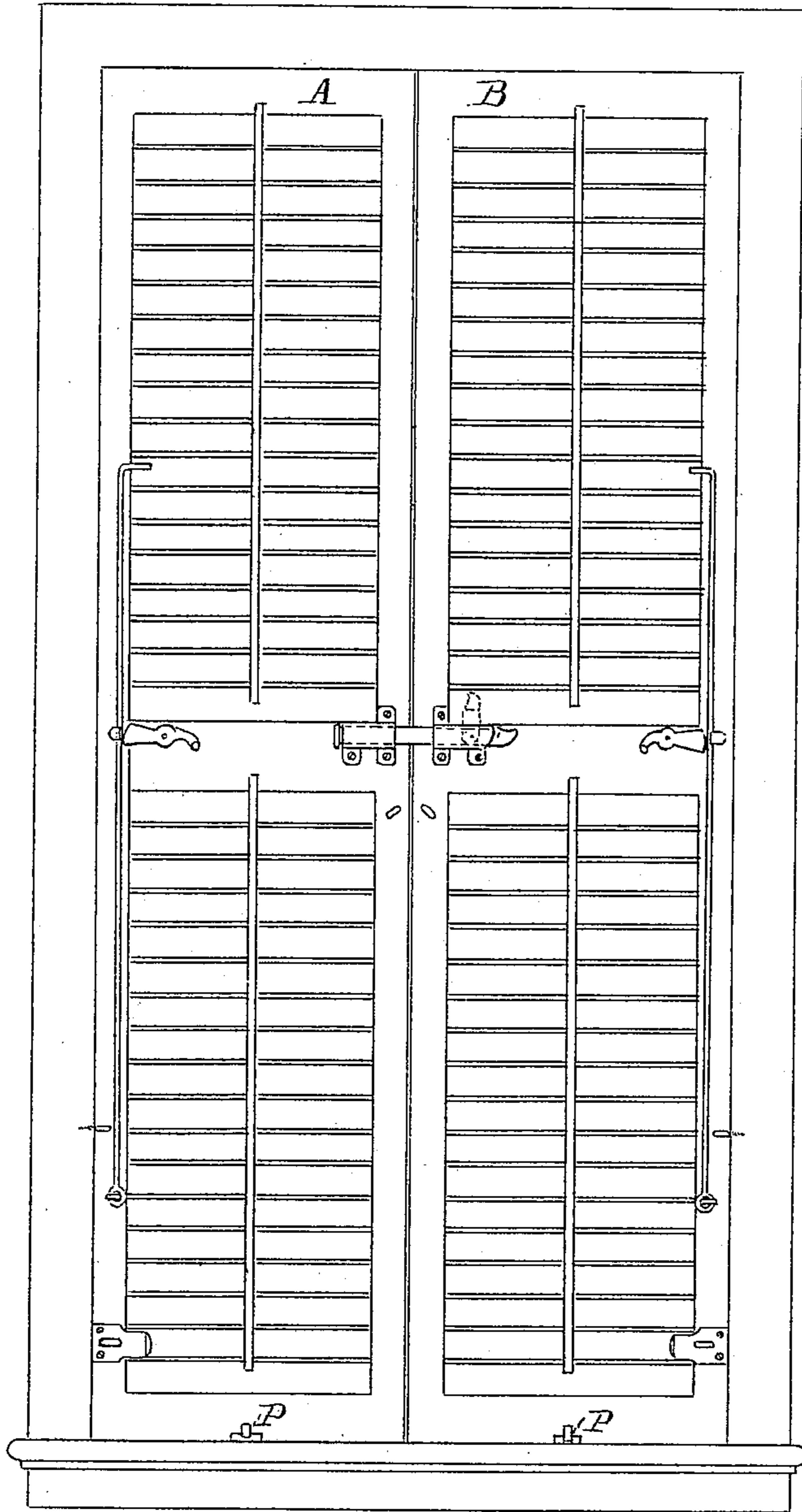
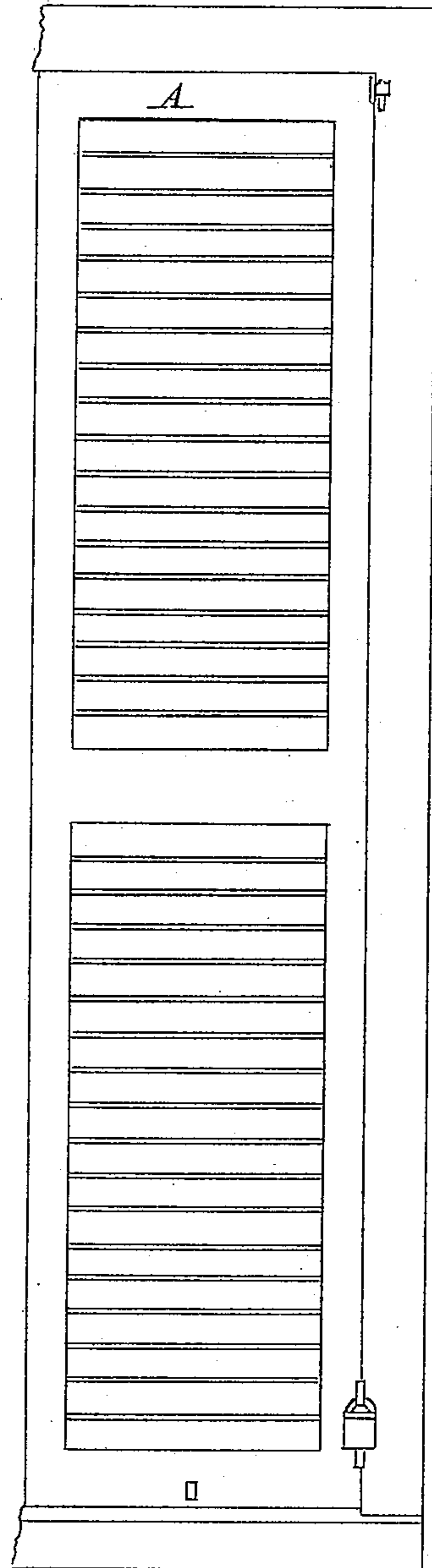


Fig. 2.



Witnesses.

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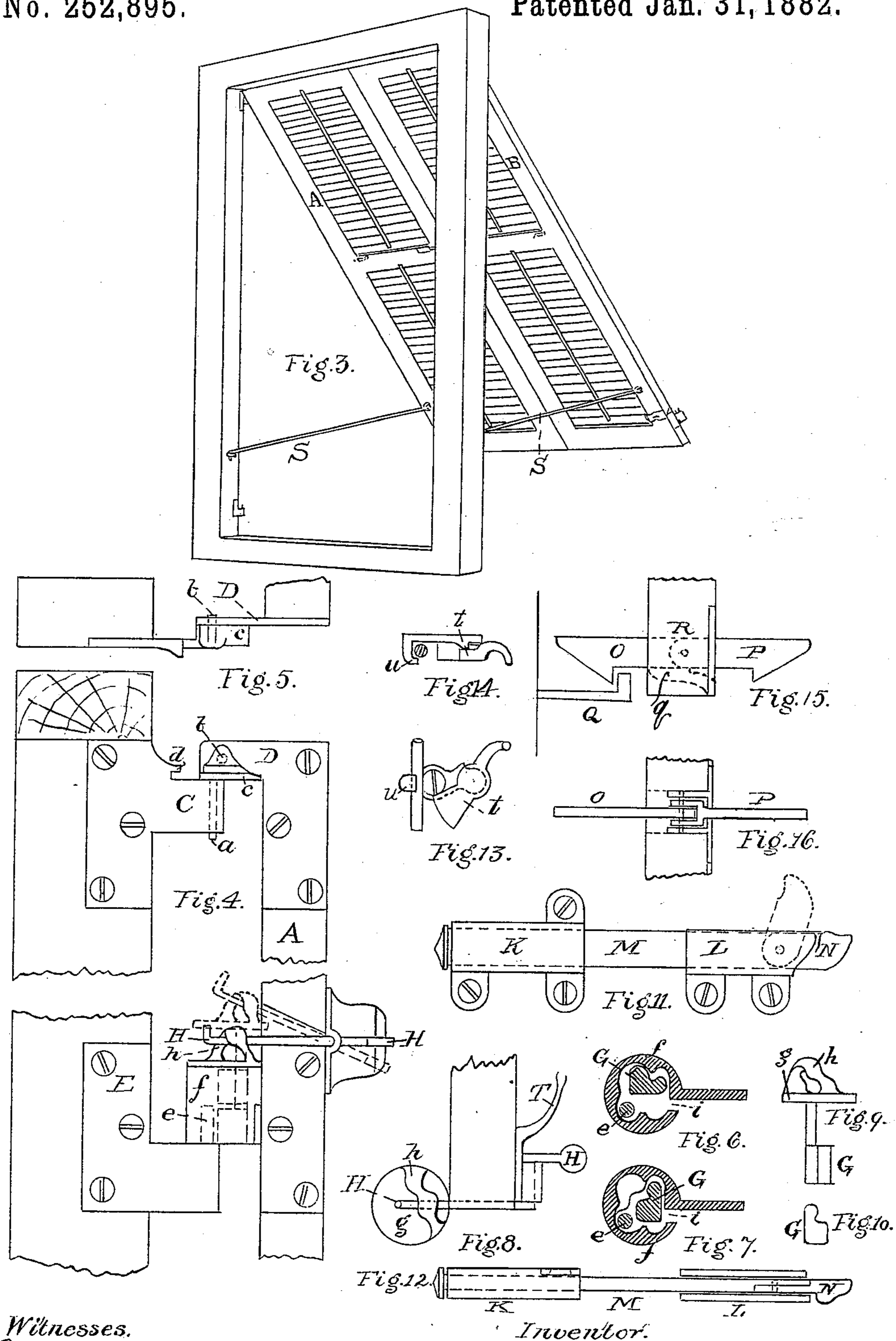
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UNITED STATES PATENT OFFICE.

EZEKIEL P. PIERCE, OF CAMBRIDGE, MASSACHUSETTS.

AWNING-BLIND HINGE.

SPECIFICATION forming part of Letters Patent No. 252,895, dated January 31, 1882.

Application filed April 30, 1881. (Model.)

To all whom it may concern:

Be it known that I, E. P. PIERCE, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Blind-Fixtures; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

With reference to the accompanying drawings, Figure 1 is an elevation of a set of window-blinds viewed from the inside and provided with my improved fastenings or fixtures. Fig. 2 is a similar elevation of half the window viewed from the outside. Fig. 3 is a perspective view, shown as an awning. Fig. 4 is an elevation of the half blind thrown open, view at right angles with that of Fig. 2, and a part broken out to reduce the length of the figure. Fig. 5 is a plan of the upper hinge. Fig. 6 is a sectional plan of the lower hinge—that part of it which attaches to the blind—the tumbler being in the lifted position that leaves the hook or journal part free to pass out. Fig. 7 is a similar sectional plan, showing the tumbler dropped down, in which position it is so turned, as shown, that the journal cannot pass out by it. Fig. 8 is a plan of the same part, together with thumb lever or lifter and finger-piece T, &c. Fig. 9 is an elevation of the tumbler with the attached cam-loop *h*, by which the thumb-lever H lifts it and causes it to turn on a vertical axis. Fig. 10 is an under view of the tumbler. Fig. 11 is an elevation of a bar-fast, which secures the two parts of the blind together when used as an awning. Fig. 12 is a plan of the same. Fig. 13 is an elevation of a keeper for the stay-rods. Fig. 14 is a plan of the same. Fig. 15 is an elevation of the lock or latch, &c. Fig. 16 is a plan of same.

Like letters refer to the same or corresponding parts in all the figures.

The nature of my invention relates to the improved construction of these several parts of that class of blind-fixtures which are so applied as to adapt the blind to swing on vertical axes for ordinary use and on a horizontal axis for awning uses, and for operating and making them secure in the various positions contemplated in their use.

A and B indicate the two halves of the blind. C is the fixed part of the upper hinge, and is provided with a journal-socket.

D is the swinging part of the upper hinge, and has the vertical axis journal *a* hinged or pivoted to it, with a horizontal axis at *b*. Upon the head of journal *a* is formed a spur or latch, *e*, which, when the blind is closed, swings into the recess formed by the projecting spur *d* on the stationary or fixed part C of the hinge.

The lower hinge has a fixed part, E, carrying a journal, *e*, also a swinging part, *f*, chambered and slotted. (See Figs. 6 and 7.) A tumbler, G, with circular head *g*, is pendent upon thumb-lever H by means of a cam-loop, *h*. The tumbler G hangs naturally and freely upon lever H in the position shown in Fig. 7, in which position it closes the slot *i* in part *f* of the lower hinge. The thumb-lever H is used to lift the tumbler G clear of the journal *e*, Fig. 4. Then the swinging part *f* is free to leave the journal *e*, the journal *e* passing through slot *i*. When the thumb-lever H is let go the tumbler falls into the position shown in Fig. 7; but when in re-hinging the lower hinge the journal *e* passes in through the slot *i* it turns the tumbler in passing it into the position shown in Fig. 6; but after passing it the tumbler falls back with a downward-turning motion into same position again, as shown in Fig. 7. The cam-loop *h*, acting on lever H as the journal passes in, lifts the tumbler, and when the journal has passed, the tumbler, in falling, is caused by the same cam-loop to turn back into the position shown in Fig. 7.

The bar for securing together the two blinds (see Figs. 11 and 12) is composed of the guide-piece K, latch or catch L, sliding bar M, and button or lock N. When the button N is turned up, as indicated by dotted lines, the bar M may be moved back longitudinally from the catch L, leaving the two halves of the blind free to be swung open in the ordinary manner. When they are closed it is drawn forward, as shown in Fig. 11, and then the button N being turned down, as shown in the same figure, it is locked.

Fig. 15 shows the shutter-fastener for securing the halves of the blind both when swung open and when closed. O is a hook or latch projecting outside the blind, and P a similar one projecting inside. These are furnished

with a suitable catch for each. (See Q, Fig. 15.)
 The part P is so jointed in connection with
 part O (like a rule-joint) that by pressing down
 part P part O is lifted and unlatched, while
 5 the socket R is provided with a stop under
 part O, which will prevent its being pressed
 down so as to lift or unfasten part P from the
 outside, while both parts are free to lift for
 latching and unlatching, as described.
 10 Figs. 13 and 14 show a device for holding
 the stay-rods when not in use. (See Fig. 1.)
 A cam, *t*, holds the rod in a recess or hook, *u*.
 Fig. 1 shows the blinds closed in the ordinary
 manner and fastened with the device of Figs.
 15 15 and 16. The bar-fast of Figs. 11 and 12 is
 also adjusted ready to open the blind as an
 awning. On unfastening the fasts P the bot-
 tom of the blinds is swung out and the stay-
 rods S hooked to the window-casing (see
 20 Fig. 3) for awning use. If to be opened in the
 ordinary manner, the bar-fast M is unfastened,
 as described, and slid back. Then, fastenings P

being lifted, each half of the blind is opened
 and swung back. Fast O, catching upon catch
 Q upon the building, as in Fig. 15, holds it 25
 open.

The parts may be made of any suitable ma-
 terial, usually, however, of malleable-iron cast-
 ings.

I claim—

1. The tumbler *h g* G, in combination with 30
 socket portion *f*, having slot *i* and pintle *e*,
 substantially as described.

2. The lever H, in combination with the cam-
 loop *h*, tumbler G, and the parts *e f*, substan- 35
 tially as described.

3. The pivoted and rotating journal *a*, con-
 structed with the latch *c*, in combination with
 the part C, constructed with the projection *d*
 and part D, substantially as described.

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Witnesses:

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