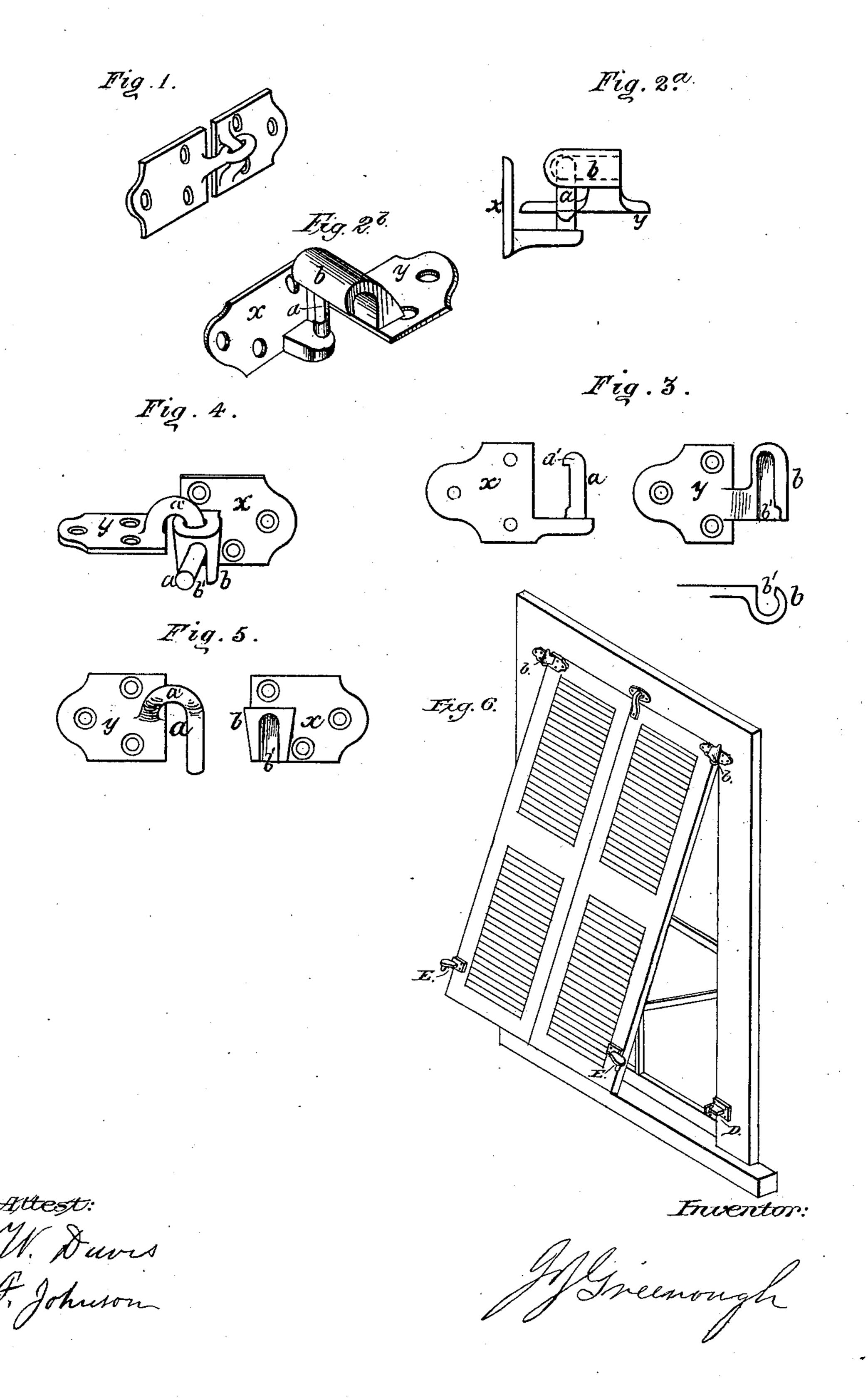
## J. J. GREENOUGH. Hinge for Awning-Blinds.

No. 201,108.

Patented March 12, 1878.



## UNITED STATES PATENT OFFICE.

JOHN J. GREENOUGH, OF SYRACUSE, NEW YORK.

## IMPROVEMENT IN HINGES FOR AWNING-BLINDS.

Specification forming part of Letters Patent No. 201,108, dated March 12, 1878; application filed December 31, 1877.

To all whom it may concern:

Be it known that I, John J. Greenough, of Syracuse, New York, have invented certain Improvements in the Hinges for Awning-Blinds heretofore patented by me, (the present device being confined to the upper hinge only,) of which the following is a specification:

My upper hinge, described and shown in my former patent, was defective in some respects, and was unstable, having not only a movement in two directions, as required for the purpose, but also in any position the blind could be placed, as is the case with any of the well-known universal joints, any of which, it is obvious, would answer to allow the double motion required in using the ordinary outside blind for an awning.

To illustrate this I have shown in Figure 1 the eyebolt, with its shanks formed for attachment to a blind and window-frame. This forms no part of my present invention, but simply shows that any of the well-known joints that admit of a movement in two or more planes can be used—a feature I do not here claim.

My present invention has a movement in two planes only—a horizontal plane and one at right angles to the face of the windowframe—and it has the further important feature that the two parts of the hinge cannot be separated, but are locked together when the bottom of the blind is thrown out. To disconnect them the two parts of the hinge must be brought parallel and the socket and pintle separated, as in any ordinary hinge.

The construction is as follows, referring to the drawing, in which—

Fig. 1<sup>a</sup> shows a geometrical profile, with the part y thrown outward horizontally and coupled with the upper end of the pintle a. Fig. 2<sup>b</sup> is a perspective view of the same. Fig. 3 shows the two parts of the hinge separate. Fig. 4 is a modification reversing the attachments of the parts; Fig. 5, the parts of Fig. 4 detached; Fig. 6, perspective view of a blind and window-frame, with the blind thrown out as an awning.

The plates x y, by which the parts of the hinge are affixed to the window-frame and blind, may be of any of the usual forms em-

ployed in the ordinary blind-hinge, or suited

to any peculiar position.

In Figs. 2 and 3 the part x, to which the pintle a is attached, is made to be attached to the window-frame; the part y, carrying the thimble upon it, is attached to the blind. The pintle a is straight and cylindrical, and may be scarfed off on one side for nearly its whole length, leaving the lower part and the upper end at a' cylindrical; or the part a' may be projected from a cylindrical pintle to form a lock to hold the pintle and socket in union. The socket b is made to fit onto the cylindrical pintle, as in some of the present windowblind hinges; but there is a slot, b', on one side, as shown in the drawing, to allow that part of the hinge to be turned outward to any. desired angle to the plane in which the part x is fixed, while, at the same time, the socket and pintle are securely locked together by the projection a' on the head of the pintle, which cannot pass through the slot b'. When the socket is perpendicular and surrounding the pintle it can be turned horizontally thereon, and it is then so locked therewith that its action is precisely the same as an ordinary blind-hinge.

In Figs. 4 and 5 the socket b is attached to the plate x affixed to the window-frame, and the pintle is attached to the plate y affixed to the blind, reversing the positions of the socket and pintle from that shown in Figs. 2 and 3. This necessitates a difference in the form of the parts. The pintle a is attached to the plate y by a shank, curving in two directions at right angles, and forming what is generally known as a "goose-neck," a'. The straight part enters the thimble or socket b at top, where the socket forms a ring, or nearly so, and below which it is slotted at b' in front. It will be noted that the action of this pintle and socket is exactly analogous to that in Figs. 2 and 3. When the lower end of the blind is thrown out the lower end of the pintle passes out through the slot, the upper parts of the pintle and socket being securely locked together, as seen in Fig. 4, and when the blind is turning on the pintle as a pivot, it is held from any side movement.

I do not broadly claim a slotted socket,

as I have heretofore patented such a device; but,

Having thus fully described my improvement in upper awning-blind hinge, I claim—

The upper awning-blind hinge constructed and combined as herein specified, consisting of a socket, b, having a slot therein, through which the pintle a can pass at its lower end,

while its upper end is locked with said socket by means of a projection on the pintle, so that the two parts cannot separate, substantially as and for the purposes specified. J. J. GREENOUGH.

Witnesses:

FREDCK. HOWARD, J. P. Munro.