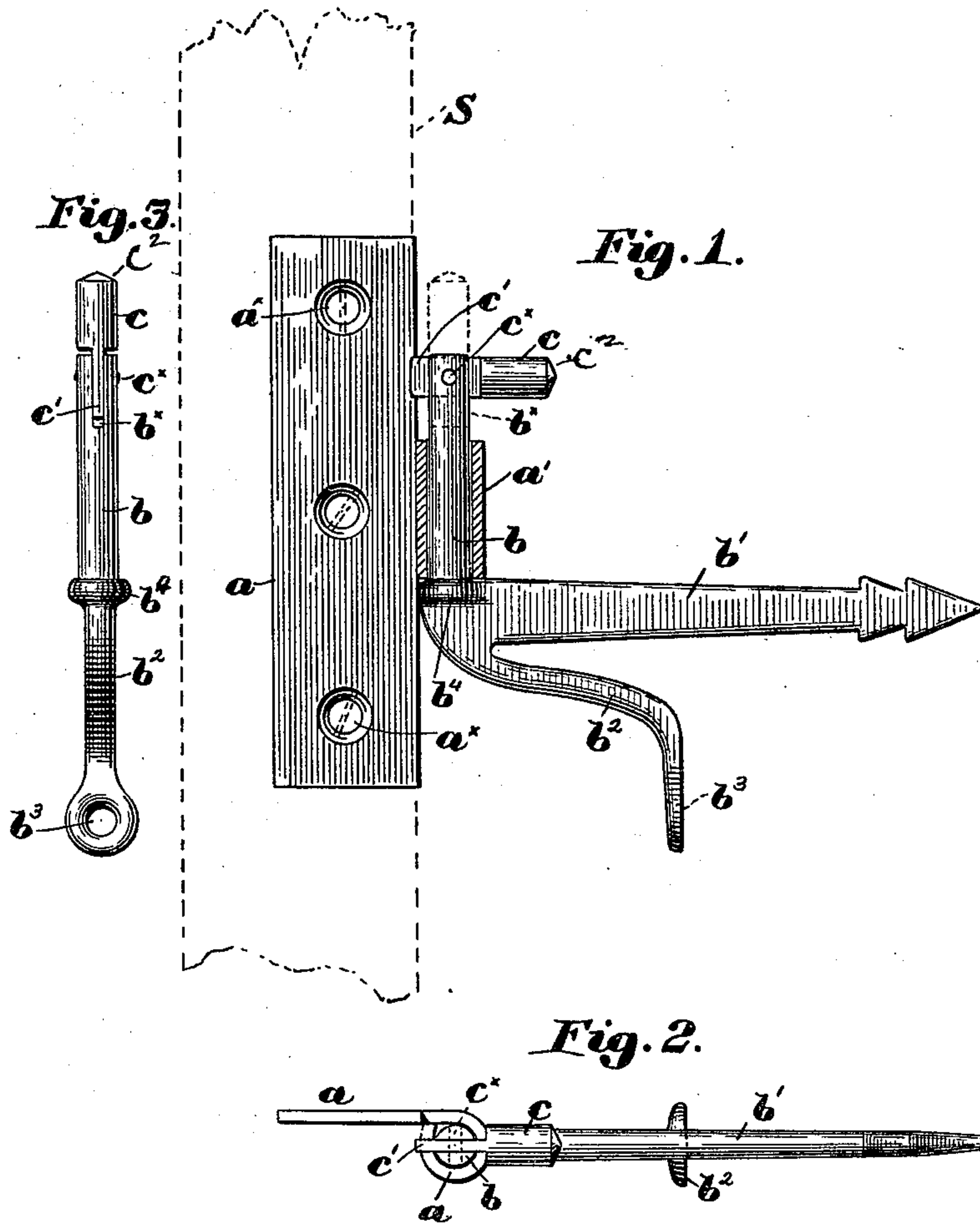


(No Model.)

J. M. VAN HORNE.
HINGE.

No. 584,972.

Patented June 22, 1897.



Witnesses:
Walter S. Lombard.
Thomas J. Drummond.

Inventor:
James M. Van Horne,
by Crosby Gregory.
Attys.

UNITED STATES PATENT OFFICE.

JAMES M. VAN HORNE, OF ALLSTON, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO GEORGE E. BERRY, WILLIAM A. RATHBURN, AND JOHN R. MAHONY, OF SAME PLACE.

HINGE.

SPECIFICATION forming part of Letters Patent No. 584,972, dated June 22, 1897.

Application filed November 14, 1896, Serial No. 612,080. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. VAN HORNE, of Allston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Hinges, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a simple, cheap, and efficient separable hinge provided with means to prevent accidental separation of the parts.

A common form of blind or shutter hinge consists of a supporting member having an upturned pintle to enter a tubular bearing on the other member attached to the object to be swung, such as a blind or shutter. Spring-catches are usually mounted on the shutters, and in releasing the catch it is a very annoying and frequent occurrence to lift the shutter sufficiently to unship it, separating the hinge members. I have provided such a separable hinge with a movable extension, forming a part thereof, to act as a retaining device to prevent accidental separation of the parts, so that all the meritorious features of the hinge in common use are preserved and its objections overcome.

Figure 1, in side elevation and partially in section, represents a hinge embodying my invention and opened out. Fig. 2 is a top or plan view of the hinge shown in Fig. 1, and Fig. 3 is an end view of the member having the locking device.

Referring to the drawings, the member *a* is formed as a leaf or plate having holes *a*^x for screws or other fastenings and provided at one edge with a tubular bearing or hub *a'*, is of usual construction, and is in practice secured to the shutter or other movable object *S*. (See dotted lines, Fig. 1.) The other member comprises a pintle *b*, upright on the usual laterally-extended foot *b'* to be driven into the support, and the downturned foot *b*², having a screw or nail hole *b*³, all of well-known construction in this style of hinge. In the upper end of the pintle *b* is formed a longitudinal slot *b*^x, in which an extension *c*, having a flattened shank *c'*, is pivotally mounted between its ends on a pin *c*^x and so that said shank

may be frictionally held either in vertical alinement with the pintle, as shown in Fig. 3, or in a horizontal position, as shown in Fig. 1, in which latter position it acts as a stop, the ends of the extension then projecting beyond the pintle. The extension may be rounded or pointed at its upper end, as at *c*², to facilitate the assembling of the hinge members when the extension is upturned, as shown in Fig. 3, and when the members are assembled the bearing *a'* will engage the pintle below the flattened end of the extension *c*, resting on the enlarged annular base *b*⁴.

By turning the extension *c* over into full-line position, Figs. 1 and 2, the body thereof and its shank will project oppositely beyond the pintle and above the bearing *a'*, thereby preventing removal of the latter, and consequently the accidental separation of the hinge members, the end of the shank *c'* clearing the edge of the leaf *a*, but it will be seen that the extension *c* in no wise acts to lock the two members of the hinge from relative rotative movement.

The elongation of the pintle, by upturning the extension *c*, is useful when hanging shutters or the like, as the combined length of the pintle and extension is greater than the length of the pintle of the upper hinge of usual construction, so that the lower bearing can be shipped, first steadying the shutter or other object while the bearing of the upper hinge is shipped on its pintle.

Ample space is afforded below the extension when in transverse position for lifting the shutter sufficiently to unlock its spring-catch, while complete separation of the hinge members is prevented thereby.

To apply my invention where common hinges of this class are now in use, it is only necessary to substitute my novel pintle member for the pintle member of the lower hinge.

My invention is not restricted to the precise construction and arrangement herein shown, nor is its use restricted to blinds or shutters, as it is equally applicable to gates, boat-rudders, &c.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A separable hinge, one member of which
has a supporting-pintle, a cooperating mem-
ber having a hollow bearing to be entered by
and to turn freely upon the pintle, and a re-
5 taining device pivotally mounted between its
ends on the upper end of the pintle, adapted
to be turned transversely thereto to project
at each side beyond the pintle and thereby
prevent separation of the members, or to be
10 turned into alinement with and form an ex-
tension of the pintle to permit withdrawal of
the hollow bearing therefrom, substantially
as described.

2. A separable hinge, one member of which
15 has an upturned pintle longitudinally slotted
at its upper end, a retaining device having a

flattened shank to enter said slot, and piv-
oted between its ends on the pintle, adapted
to be turned transversely thereto and to pro-
ject at each end beyond it, and a cooperating 20
hinge member having a hub-like bearing for
the pintle, the oppositely-projecting ends of
the retaining device, when in operative posi-
tion, preventing separation of the two mem-
bers, substantially as described. 25

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JAMES M. VAN HORN.

Witnesses:

JOHN C. EDWARDS,
ADDIE F. DANIELS.