

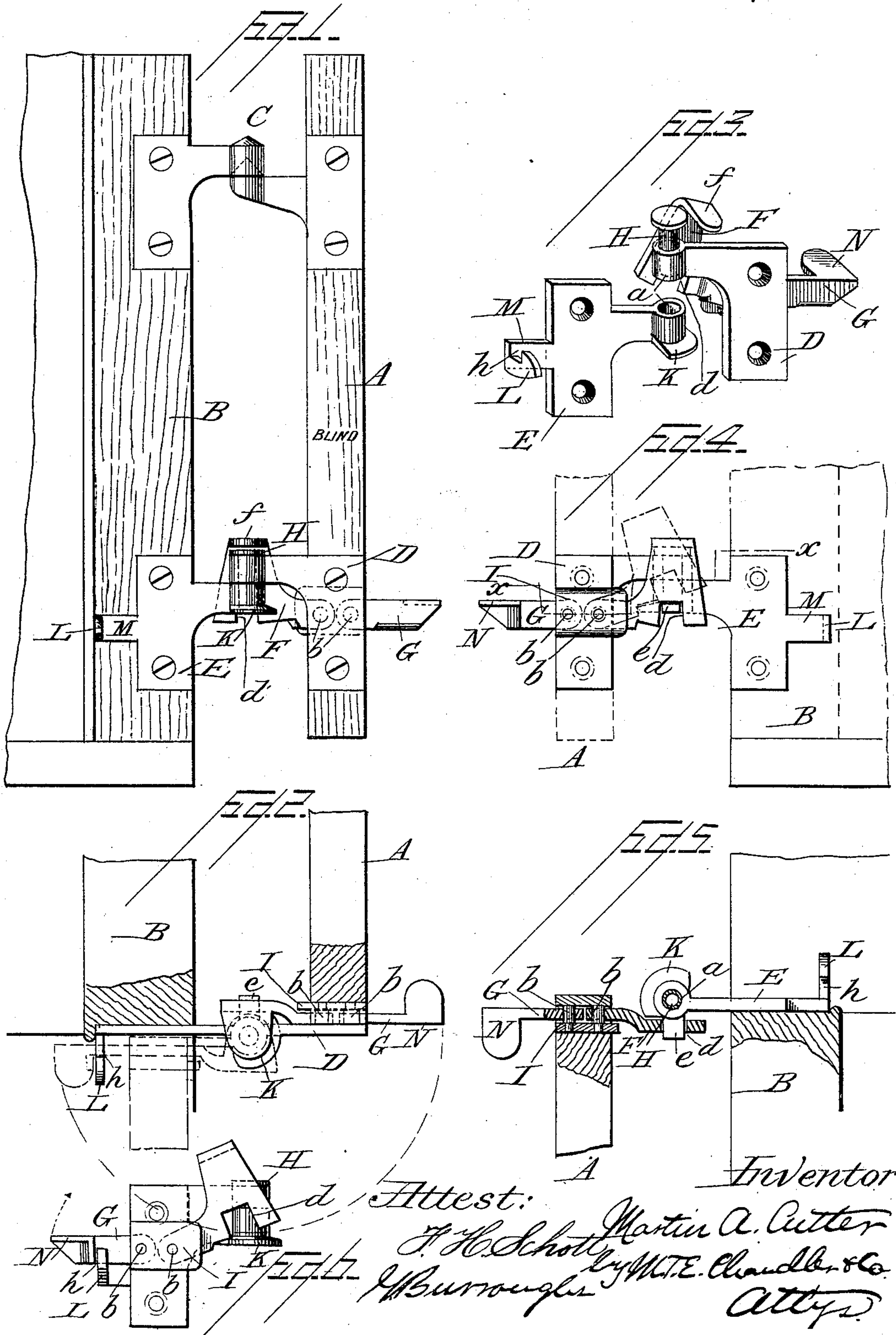
(No Model.)

2 Sheets—Sheet 1.

M. A. CUTTER.
LOCK HINGE.

No. 429,845.

Patented June 10, 1890.



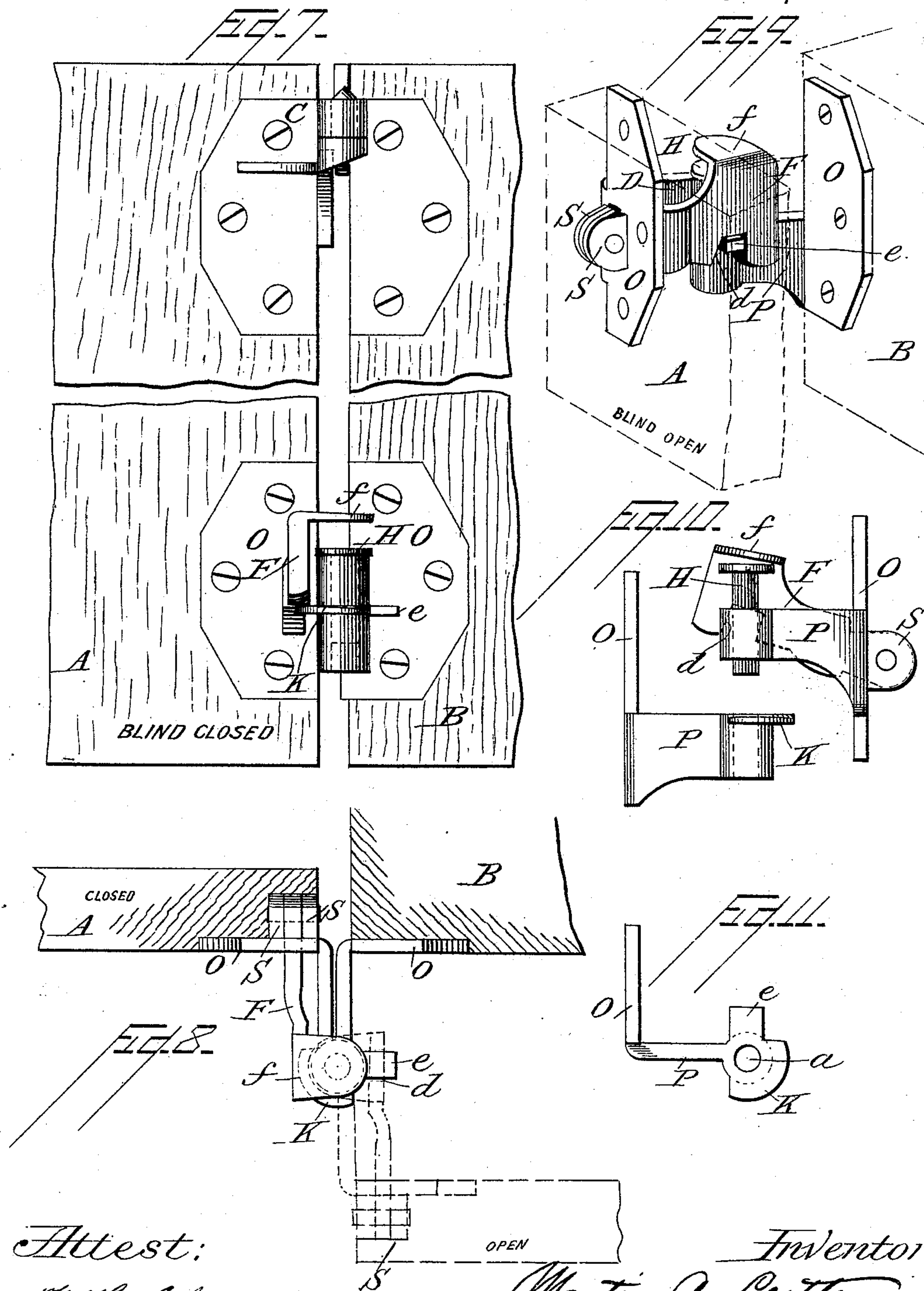
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Attest:

H. H. Schott
A. Burroughs.

OPEN

Inventor
Martin A. Cutter
by M. T. E. Chandler & Co.
Attys.

UNITED STATES PATENT OFFICE.

MARTIN A. CUTTER, OF ALLEGHENY, PENNSYLVANIA.

LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 429,845, dated June 10, 1890.

Application filed February 27, 1890. Serial No. 341,989. (No model.)

To all whom it may concern:

Be it known that I, MARTIN A. CUTTER, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Hinges; and I do 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in hinges for shutters and doors, and more especially to that class to which the invention for which Patent No. 393,217 was granted to me November 20, 1888, belongs, the object being to simplify and improve the construction of the lower hinge shown in the patent above mentioned. In making hinges according to the construction set forth in said patent, I find that great care must be taken in fitting the slide-catches in the grooves with which they register, as the least fault in construction renders the hinge more or less inoperative. The slide-catches have a tendency to bind or stick in their respective grooves. To obviate this difficulty I substitute pivoted catches for the sliding ones. By this means a cheaper, simpler, and a better operative hinge is produced, which will at the same time perform all the functions set forth in connection with said previous invention.

The invention has, further, for its object the novel construction and arrangement of parts, as will be hereinafter more fully described, designated in the appended claims, and illustrated in the accompanying drawings.

In the accompanying drawings, in which similar letters of reference designate corresponding parts, Figure 1 is a side elevation of a portion of a blind attached to the window-frame by the improved hinge, the blind being shown open and locked in that position. Fig. 2 is a plan view of the hinge. Fig. 3 is a perspective view of the two parts forming the hinge. Fig. 4 is a side elevation showing the reverse side of the hinge. Fig. 5 is a longitudinal cross-section on the line *xx* of Fig. 4. Fig. 6 is a side elevation of the hinge, showing it closed. Fig. 7 is a side elevation of the

hinge, showing a modification in which the device for locking the blind when closed is eliminated. Fig. 8 is a plan view of the modification, showing the blind closed. Fig. 9 is a perspective view of the modification, showing the blind opened. Fig. 10 is a side elevation of the two parts forming the modification. Fig. 11 is a plan view of that part of the modified hinge which is attached to the window-frame.

Referring to the drawings by letter, A represents a blind attached by the upper and lower hinges to the window-frame B. The upper of these hinges may be of any suitable kind, but preferably of the kind shown in the patent to me before mentioned. The lower hinge consists of the part D, attached to the blind, and of the part E, attached to the window-frame. Both parts are provided with a pintle-opening *a*, which, when brought into proper position, receives the pintle H, which when dropped into the opening hinges the two parts together. Projecting from the part D are two lugs *b b*, on which are pivoted the catches F and G, respectively. A casing I is formed over the inner ends of these catches, where they are pivoted on the lugs *b b*, to confine the movement of the catches. These two catches have a vertical movement independent of each other, one for locking the blind open and the other for locking it when closed. The catch F holds the blind when open. Its lower edge is beveled and is recessed at *d* for the purpose of engaging with the projection *e* of that portion of the hinge attached to the window-frame when the shutter is opened, and effectually retains it in such position until the catch is raised by hand and the shutter closed. From the upper part of this catch extends the projection *f* over the top of the pintle to prevent the displacement of the same. This projection also forms a means whereby the catch F may be easily raised, extending somewhat beyond the top of the pintle for that purpose.

Around the lower part of the pintle-socket of the part E of the hinge extends the flange K in the same horizontal plane as the projection *e*, on which the catch F rides.

L is a lug projecting from the extension M of the part of the hinge attached to the window-frame at right angles to the same. It is

recessed at *h*. When the shutter is closed, the catch *G* rides up over the outer end of the lug and drops into the recess *h*, and thereby firmly locks the shutter in a closed position.

5 A lug *N* projecting from the catch *G* forms a means for raising said catch when it is so desired.

When it is desired to open the blind, the catch *G* is raised and the blind swung open.

10 The catch *F* travels on the flange *K* until the two parts of the hinge are in the same vertical plane, when it drops and registers with the projection *e*, thereby locking the shutter to hold it open.

15 In the modification shown in the last five figures only one locking device is shown, and that for holding the shutter open.

The two parts of the hinge instead of being placed on the edges of the blind and window-frame, respectively, are attached to the sides of the same. The main plate *O* of the hinge is therefore made at right angles to the shank *P*. The catch *F* extends through the plate *O*, and is pivoted between the lugs *S S*, projecting from the back side of the plate. In attaching this part *D* of the hinge a suitable recess is made in the same for the reception of the lugs *S S*.

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

1. In a hinge of the described kind, the combination of the main parts *D* and *E*, each provided with a pintle-hole, the pintle uniting said parts, and the catches *F* and *G*, pivoted 35 to the part *D* for locking the blind in open and closed position, respectively, said catch *F* having a projection *f* for retaining the pintle in position, as set forth.

2. In a hinge of the described kind, the combination of the two main parts *D* and *E*, each having a pintle-hole, the pintle for uniting said parts, the catch *F*, pivoted on the part *D*, recessed at *d* to register with the projection *e* of the part *E*, and having a projection *f* for 45 retaining the pintle in position, substantially as specified.

3. In a hinge of the described kind, the combination of the parts *D* and *E*, each having a pintle-hole, the pintle uniting said parts, the 50 catch *F*, pivoted on the part *D* for retaining the pintle in its place, the catch *G*, pivoted to the said part *D*, and extending outward from the same, and registering with the recessed lug *L* of the part *E*, for the purpose specified. 55

In testimony whereof I affix my signature in presence of two witnesses.

MARTIN A. CUTTER.

Witnesses:

THOS. H. RABE,
A. A. HERSPERGER.