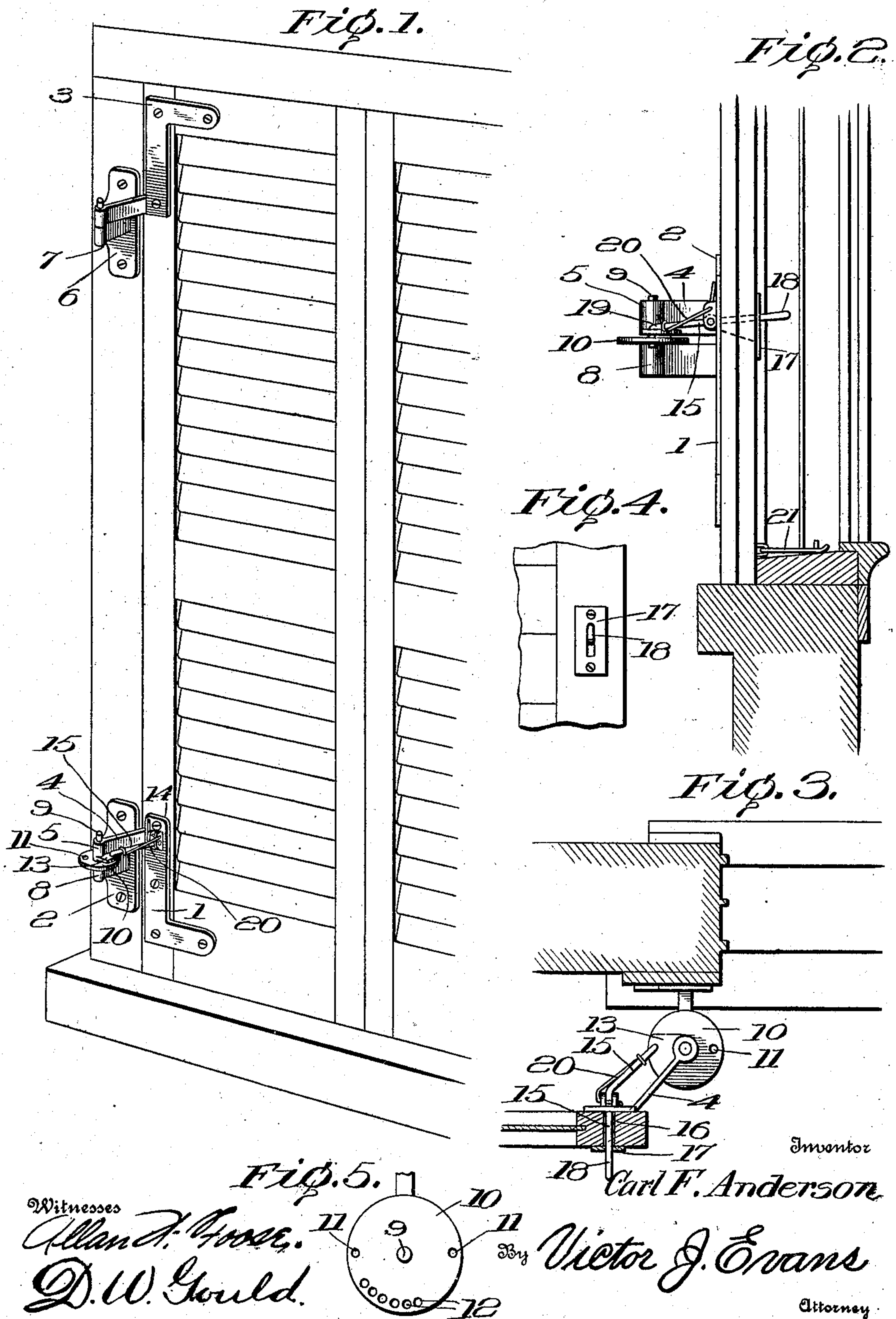


C. F. ANDERSON.
HINGE.

APPLICATION FILED NOV. 28, 1908.

924,412.

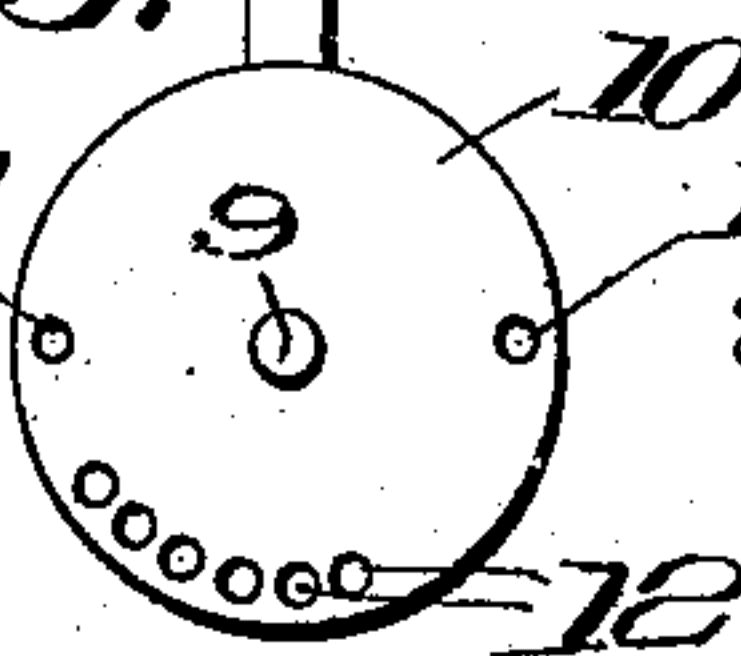
Patented June 8, 1909.



Witnesses

Allan H. Foxe.
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Fig. 5.



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HINGE.

No. 924,412.

Specification of Letters Patent.

Patented June 8, 1909.

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To all whom it may concern:

Be it known that I, CARL F. ANDERSON, a citizen of the United States, residing at Guttenberg, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Hinges, of which the following is a specification.

The invention relates to an improvement in hinges designed primarily for use on shutters and adapted to permit the shutter to be secured at any desired open relation with the window casing.

The main object of the present invention is the provision of a shutter hinge including coöperating members secured respectively to the shutter and to the casing, the casing engaging member being adapted to receive a manually operable means carried by the shutter engaging member, the connection between the respective means being adjustable whereby to secure the shutter in varying degrees of open relation relative to the casing.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a broken perspective illustrating the application and construction of my improvement. Fig. 2 is an enlarged broken elevation partly in section of the same. Fig. 3 is a transverse sectional view taken above the hinge member, the shutter being shown in fully open position. Fig. 4 is a broken elevation illustrating the means carried by the shutter to receive the locking lever. Fig. 5 is a plan of the locking disk.

Referring particularly to the accompanying drawings, my improved hinge comprises a shutter member 1 adapted to be secured to the shutter and a casing member 2 adapted to be secured to the casing.

The shutter member comprises an L-shaped strip 3 formed at appropriate intervals for the reception of screws or other fastening means, whereby the strip may be secured in place on the shutter.

The arms of the strip 3 are of respectively different lengths, the shorter arm being secured to and extending in contact with the end strip of the shutter, while the longer arm is secured to and extends in contact with the side strip of the shutter. By this means the shorter arms of the upper and lower hinges are arranged at the end of the shutter while

the longer arms extend toward each other on the side bar of the shutter. Adjacent the free end of the long arm of each strip 3 is secured a hinge leaf 4, which projects outwardly at an angle to the arm and is terminally formed with a knuckle 5.

The casing member 2 comprises a base plate 6 to be secured to the casing, from which projects a hinge leaf 7 formed at the outer end with a knuckle 8 adapted to fixedly receive and support a pivot pin 9. The sleeve member 5 of the hinge leaf 4, hereinafter termed the movable leaf, is designed to engage the pivot pin 9 of the hinge leaf 7, hereinafter termed the fixed leaf, whereby the movable leaf and thereby the shutter is adapted for a pivotal movement about the pivot pin, as will be obvious. The upper and lower hinges are, so far as described, of identical structure, but in the furtherance of the invention means are provided whereby the respective leaves of the lower hinge may be locked in adjusted position. To this end there is secured on the pivot pin 9 of the fixed leaf 7 of the lower hinge member a locking disk 10, which, at diametric points, is formed near its peripheral edge with openings 11, and in circumferential alinement with said openings and intermediate the same is also formed with a series of regularly spaced openings 12. The openings 11 are designed to form the respective limits of the position of the leaves, the innermost opening 11 serving as a locking opening when the shutter is fully closed and the opposing opening serving as a locking opening when the shutter is fully opened.

The intermediate openings 12 are designed in use for locking the shutter in a series of positions intermediate the fully opened and fully closed positions, and with this end in view it is to be understood that the said openings 12 may be arranged in any desired number or in any relative spaced relation. Secured upon the knuckle 5 adjacent the lower end thereof is a radially projecting segment 13, which is designed to overlies and operate in slightly spaced relation to the disk 10. Pivotaly mounted in ears 14 arranged on the longer arm of the lower strip 3 of the shutter member 1 is a lever 15, the inner end of which projects through an opening formed in the arm, through an opening 16 formed in the shutter and through an open-

ing in a guard plate 17 secured on the inner surface of the shutter, the end of the lever projecting beyond the guard plate to provide a bearing handle 18. Beyond the shutter the
 5 lever is bent laterally and formed with a depending end 19 adapted to normally rest in an opening formed in the segment 13, said end 19 being of a length to extend through one of the openings in the disk 10 when the
 10 respective leaves are so arranged as to aline the particular opening with the opening in the segment. A spring 20 is supported at one end in the ears 14 and is formed at the opposite end to bear upon the lever near the
 15 free end of the latter, thereby normally exerting a downward pressure upon the projection 19.

It is obvious that by properly adjusting the shutter the projection 19 of the lever may
 20 be caused to engage the appropriate opening in the disk 10 and thereby lock the shutter in the desired position without possibility of accidental movement. By depressing the handle end 18 of the lever the projection 19
 25 will be raised from the particular opening in the disk to free the shutter for any usual or desired movement.

A hasp and staple connection is provided for securing the shutters in closed position
 30 against opening from the outside, as shown in Fig. 2.

Having thus described the invention what is claimed as new, is:—

A hinge leaf comprising a leaf member secured to a fixture, a pivot pin secured to 35 said member, a disk carried by said member and encircling the pin, said disk being formed with a series of openings, a cooperating leaf member secured to a relatively movable element and including an arm terminally 40 formed with a knuckle to engage the pivot pin of the first leaf member, a segment projecting from the knuckle and formed with an opening to register with any one of the openings in the disk, the member secured to the 45 movable element being formed with an opening, ears projecting from said member in alinement with the edges of the opening, a lever pivoted between said ears and formed with an end to engage the opening in the 50 segment and the registering opening in the disk, and a spring secured at one end in the ears and at the opposite end overlying and bearing upon the lever adjacent its engagement with the segment. 55

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

CARL F. ANDERSON.

Witnesses:

CHAS. BISCHOFF,
 HENRY DREBING.