

No. 895,704.

PATENTED AUG. 11, 1908.

J. N. WELLER.
HINGE.

APPLICATION FILED NOV. 7, 1907.

Fig. 1.

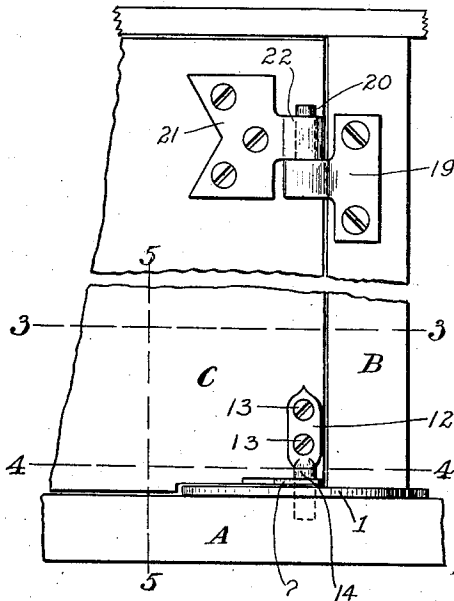


Fig. 2.

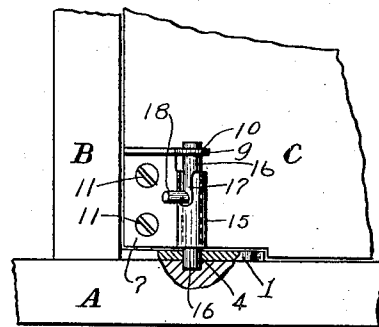


Fig. 3.

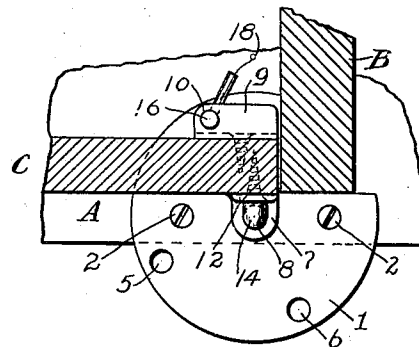


Fig. 4.

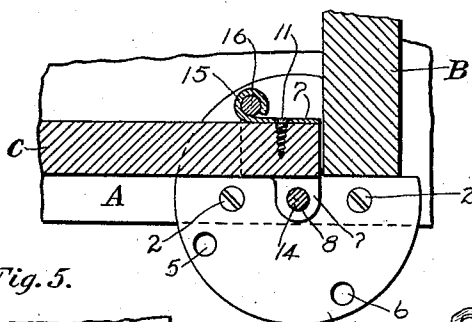


Fig. 5.

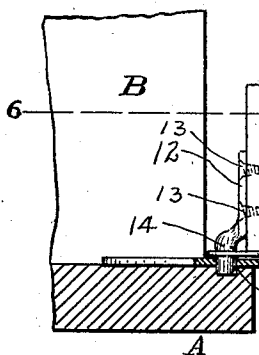


Fig. 7.

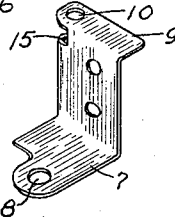


Fig. 8.

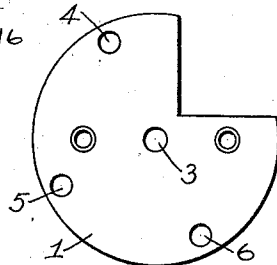
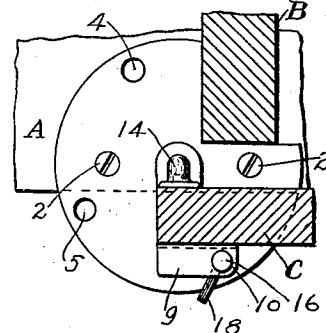


Fig. 6.



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UNITED STATES PATENT OFFICE.

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HINGE.

No. 895,704.

Specification of Letters Patent.

Patented Aug. 11, 1908.

Application filed November 7, 1907. Serial No. 401,086.

To all whom it may concern:

Be it known that I, JOHN N. WELLER, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented a new and useful Improvement in Hinges, of which the following is a specification, reference being had to the accompanying drawing.

My improvement relates particularly to hinges to be applied to upright blinds and doors and serve as a means for locking the blind or door when closed or open or partially open.

In the accompanying drawings, Figure 1 is an outside view of portions of a door, a jamb, and a sill, to which my hinge is applied, the door being closed; Fig. 2 is an inside view of the same mechanism; Fig. 3 is a section on the line 3—3 of Fig. 1; Fig. 4 is a section on the line 4—4 of Fig. 1; Fig. 5 is a section on the line 5—5 of Fig. 1, looking toward the right, the door being fully opened; Fig. 6 is a section on the line 6—6 of Fig. 5; Fig. 7 is a detail view of a plate applied to the lower edge of the door; Fig. 8 is a plan of a plate applied to the sill.

Referring to said drawings, A is a sill of a door or window opening; B is a jamb; and C is an upright door or blind hinged at the side edge which abuts against said jamb, by means of my improved hinge applied to the lower end of said door.

A sill plate, 1, rests horizontally upon the sill, A, adjacent the jamb, B, and below one corner of the door, C, and projects beyond each side of the door and is suitably secured to the sill, as by means of screws, 2, 2. In front of said door, said plate, 1, has a central aperture, 3. The portion of the plate, 1, projecting beyond the inner face of said door has a marginal aperture, 4, to receive a locking bolt, as will be hereinafter described, and the portion of said plate which extends outward beyond the outer face of said door has a marginal aperture, 5, and a marginal aperture, 6, at the same distance from the aperture, 3, that the aperture, 4, is from the aperture, 3, and adapted to receive said locking bolt when the door is open or partially open, as will be hereinafter described.

Above the plate, 1, a door plate, 7, is applied horizontally to the lower edge of the door, said plate extending outward beyond the outer face of the door and being there provided with an aperture, 8. And said

plate extends upward along the inner face of the door and then extends laterally away from the door, the extension, 9, thus formed having an aperture, 10, in alinement with the aperture, 4, when the door is closed. Said plate is secured to the door by means of screws, 11, extending through said plate into the door. On the outer face of said door is applied a member, 12, by means of screws or nails, 13, said member having a downward-directed shaft or pintle, 14, extending through the aperture, 8, in the plate, 7, and into the aperture, 3, of the plate, 1. Said shaft or pintle forms a journal upon which the blind or door turns, the aperture, 3, being the bearing for such journal. The plate, 7, forms a stay for the shaft, 14, close to the plate, 1.

A barrel or sleeve, 15, is formed upon the upright portion of the plate, 7, in upright position and in alinement with the aperture, 10, of the extension, 9, of said plate. Through said aperture and sleeve loosely extends a bolt, 16. Said bolt is adapted to slide downward and extend by its lower end into the aperture, 4, of the plate, 1. When said bolt has so entered, the door is locked or held immovably. After raising said bolt out of said aperture, 4, the door may be opened as far as desired. When the door is opened far enough to bring the bolt, 16, directly above the aperture, 5, said bolt may be moved downward so as to extend its lower end into said aperture and immovably hold or lock the door in said position. And when the door has been opened far enough to bring said bolt above the aperture, 6, said bolt may be moved downward so as to enter said aperture, and the door is then immovably held or locked in such position.

The sleeve, 15 is provided at its upper end with a slot, 17, and the bolt, 16, is provided with a horizontal arm, 18, which may enter the notch, 17, when the bolt is moved downward. When the bolt has been raised far enough to bring said arm above the upper end of said sleeve, the bolt may be partially rotated so as to bring said arm out of the range of said notch and rest upon the adjacent wall of said sleeve and thus hold said bolt in the elevated position. The relative proportion of these several parts is to be such as that said arm will so rest upon the upper end of said sleeve when said bolt has been raised sufficiently to bring its lower end out

of the aperture, 4, and a little above the upper face of the plate, 1, so that the door or blind can swing freely.

The upper portion of the door or blind, C, may be secured by any suitable form of hinge, preferably a form permitting the lifting of the blind or door when the latter has been opened. Such a hinge is shown in the upper portion of Fig. 1, 19 being a member having a pintle or journal, 20, and 21 being a member having an eye or bearing, 22, receiving said pintle.

It will be observed that the mechanism for locking the door or hinge is located on the inner side of said door where it is inaccessible from the outside. And it will be observed that the lower horizontal portion of the plate, 7, forms a reinforcement for the shaft or journal, 14, upon which the lower portion of the blind or door turns, and that the same plate, 7, constitutes a foundation for the locking bolt, 16.

I claim as my invention:

1. In a structure of the nature described, a sill plate having an aperture and being adapted to be secured horizontally upon a sill beneath a corner of a door, an apertured door plate adapted to be applied horizontally across the lower edge of said door above said sill plate with the portion having the aper-

ture extending outward beyond one of the side faces of said door, and a journal adapted to be secured to such face of said door and extend through said aperture and enter the aperture of the sill plate and form a hinge for said door.

2. In a structure of the nature described, a sill plate having two apertures and being adapted to be secured horizontally upon a sill beneath a corner of a door, an apertured door plate adapted to be applied horizontally across the lower edge of said door above said sill plate with the portion having the aperture extending outward beyond one of the side faces of said door, a journal adapted to be secured to such face of said door and extend through said aperture and enter one of the apertures of the sill plate and form a hinge for said door, and a locking bolt adapted to be secured to the opposite face of said door and enter the other aperture of said sill plate.

In testimony whereof I have signed my name, in presence of two witnesses, this 5th day of November, in the year one thousand nine hundred and seven.

JOHN N. WELLER.

Witnesses:

CYRUS KEHR,
C. A. MORSE.