

J. K. WATERS.
DOOR HINGE.
APPLICATION FILED MAY 8, 1912.

1,062,623.

Patented May 27, 1913.

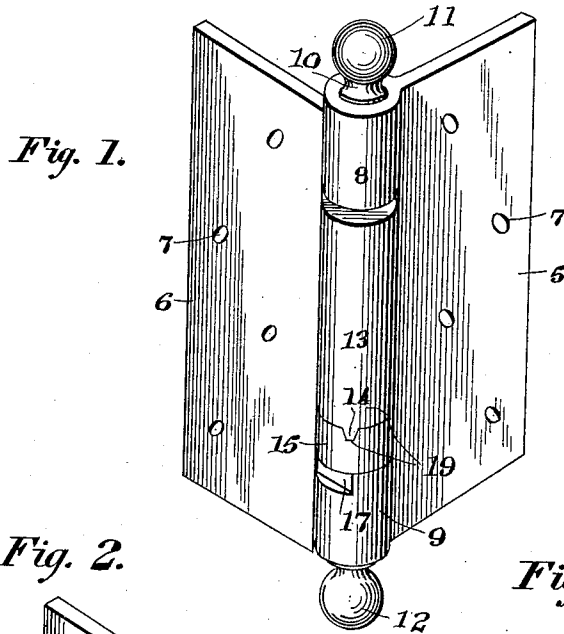


Fig. 2.

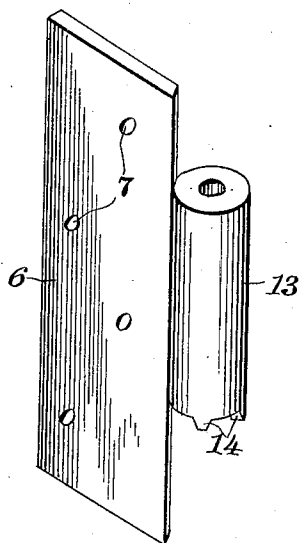


Fig. 3.

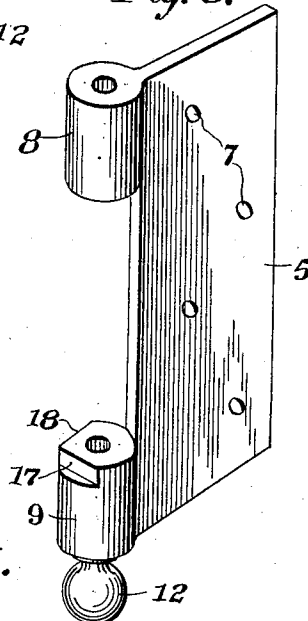


Fig. 4.

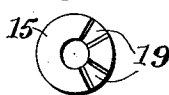
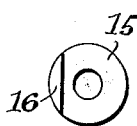


Fig. 5.



Witnesses

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DOOR-HINGE.

1,062,623.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed May 8, 1912. Serial No. 695,909.

To all whom it may concern:

Be it known that I, JOHN K. WATERS, a citizen of the United States, residing at Banning, in the county of Riverside and State of California, have invented new and useful Improvements in Door - Hinges, of which the following is a specification.

The general object of this invention is the provision of a door hinge having a removable pintle, the leaves of said hinge being constructed in a novel manner so that one of said leaves is slidable upon said pintle, means being mounted upon said pintle for engaging said leaves to retain the same in an adjusted position, whereby slamming of the door will be prevented after the same has been opened.

In carrying out the objects of the invention generally stated above, it will be understood, of course, that the essential features thereof are susceptible of changes in details and structural arrangements, one preferred and practical embodiment being shown in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the hinge, showing the same in a locking position after the door has been swung open. Fig. 2 is a perspective view of one of the leaves of the hinge. Fig. 3 is a similar view of the other leaf of the hinge. Fig. 4 is an end elevation of the locking sleeve used in connection with the invention. Fig. 5 is an end view of one of the locking heads.

Referring more particularly to the accompanying drawing in which like reference characters designate similar parts, it will be seen that the hinge comprises a pair of leaves 5 and 6, each of said leaves being provided with a plurality of openings 7 for the reception of suitable fastening devices. The leaf 5 is provided on one longitudinal edge thereof with a pair of spaced bearing knuckles 8 and 9 having alined openings adapted to receive the removable pintle 10, one end of which is provided with a fixed head 11 while the other end is adapted to be received with an opening formed upon the head 12 carried by the knuckle 9. The pintle is adapted to have mounted thereon between the knuckles 8 and 9, the elongated bearing knuckle 13 extending laterally from one of the longitudinal edges of the leaf 6. The end of the bearing knuckle 13 adjacent the collar 9 is provided

with a pair of tapered lugs 14 for a purpose which will be presently described.

A locking sleeve 15 is mounted upon the pintle 10 between the knuckles 9 and 13, said sleeve being provided with an extension 16 having a flat surface which is adapted to engage either of the flat surfaces 17 or 18 formed on the inner end of the knuckle 9. The locking sleeve 15 is also provided upon the edge adjacent the knuckle 13 with a pair of tapered notches 19 which are adapted to receive the tapered lugs 14 on the said knuckle 13 when the hinge is in a locking position. When in its locking position it will be seen, by referring to Fig. 1, that the leaves 5 and 6 extend substantially at right angles to each other thus retaining the door in an open position and that the end of the locking sleeve carrying the extension 16 will be spaced from the inner end of the knuckle 8. Presuming that the leaf 6 is secured to the door, it will be seen that this section will have a slight longitudinal movement upon the pintle 10 so that when it is desired to close the door, a slight lifting movement may be applied thereto thus causing the locking sleeve to come into engagement with the knuckle 8. By reason of the tapered formation of the lugs 14 and notches 19, a swinging movement imparted to the door will cause the lugs to disengage from the notches whereby the leaf 6 of the hinge will be free to rotate upon the pintle thus permitting the door to be swung to a closing position.

If it is desired to lock the door in a substantially closing position, it is only necessary to remove the pintle 9 and turn the locking sleeve so that the extension 16 thereof will engage the other flat surface of the knuckle 9 from that engaged by said extension as shown in Fig. 1. This reverse position of the locking sleeve will cause the door to be locked when the leaves of the hinge are substantially at an angle of 180 degrees to each other. The hinge may be used for locking a door in its position when used in connection with screen doors which are adapted to swing both inwardly and outwardly and it will thus be seen that the door will always be retained in a locking closed position.

From the foregoing description taken in connection with the drawing it will be seen that the invention contemplates providing

a hinge which is simple in construction thus reducing the cost of manufacture of the same to a minimum and which is effective in carrying out the purpose for which it is
5 designed.

What is claimed is:—

A hinge comprising a pair of leaves, one of which is provided with a pair of spaced knuckles, one of said knuckles being cut
10 away to provide a plurality of flat surfaces, a removable pintle engaging said knuckles, the other leaf of said hinge having a knuckle adapted to be interposed between the knuckles of the first mentioned leaf and
15 slidable longitudinally of said pintle, and

a locking sleeve mounted upon said pintle and adapted for inlocking relation with the knuckle of the second mentioned leaf, said locking sleeve being provided with an extension adapted for engagement with any
20 one of the plurality of flat surfaces formed upon one of the knuckles of the first mentioned leaf for releasably retaining said leaves in an adjusted position.

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

JOHN K. WATERS.

Witnesses:

H. OGDEN,

CHAS. EARLL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents-
Washington, D. C."