

(Model.)

J. H. DOUGHERTY.
LOCK FOR SLIDING DOORS.

No. 297,239.

Patented Apr. 22, 1884.

Fig. 1.

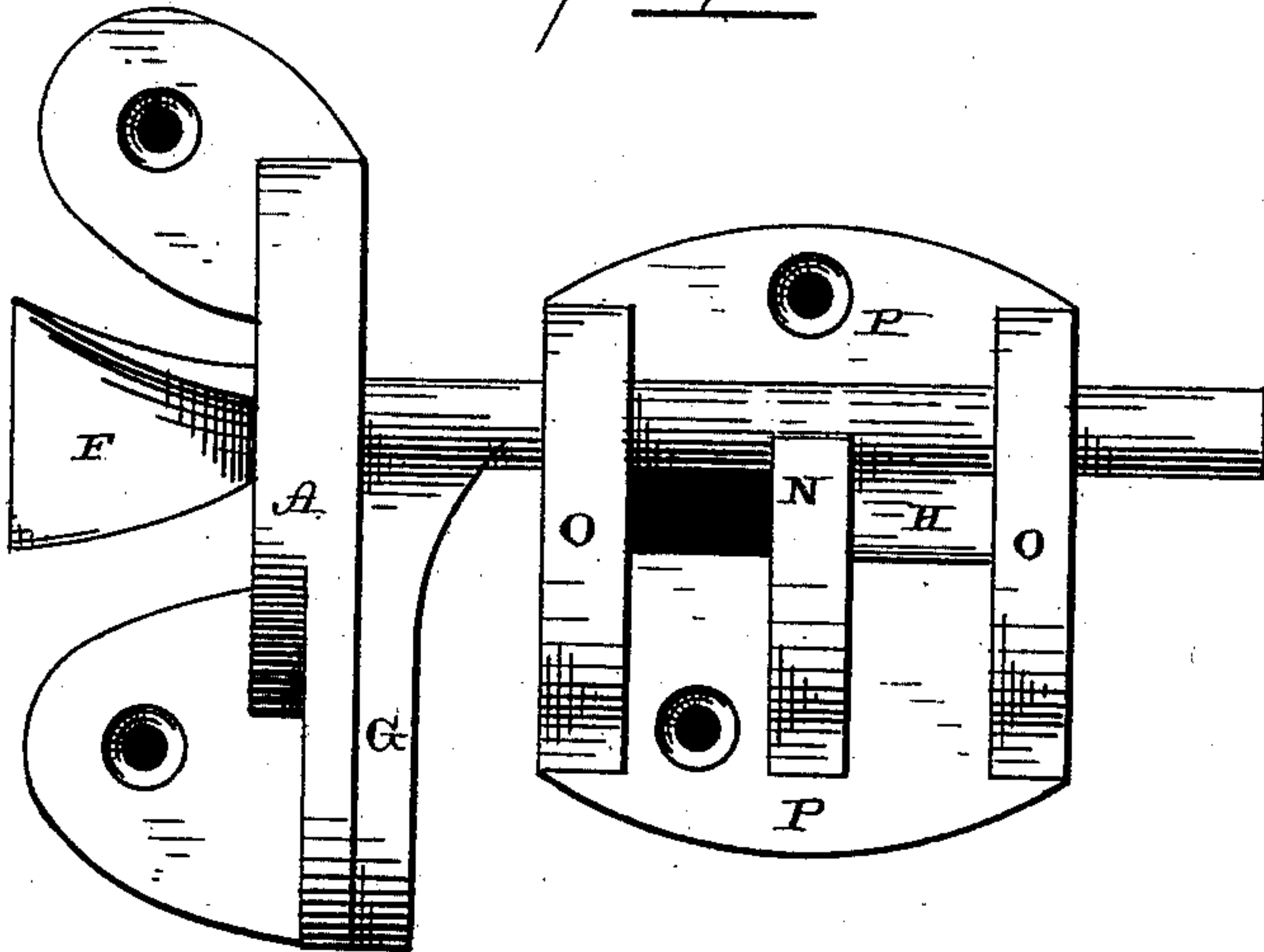


Fig. 2.

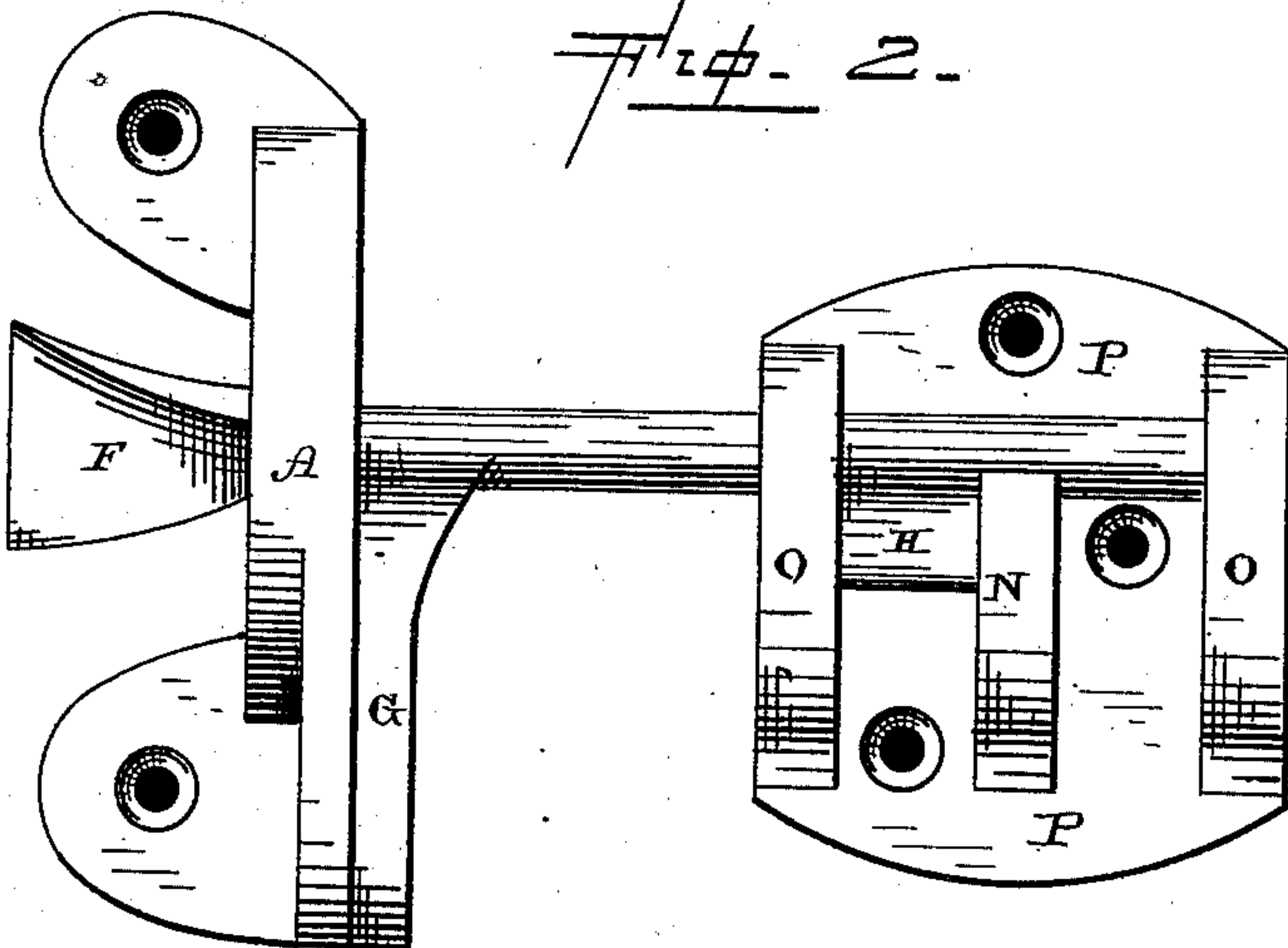


Fig. 3.

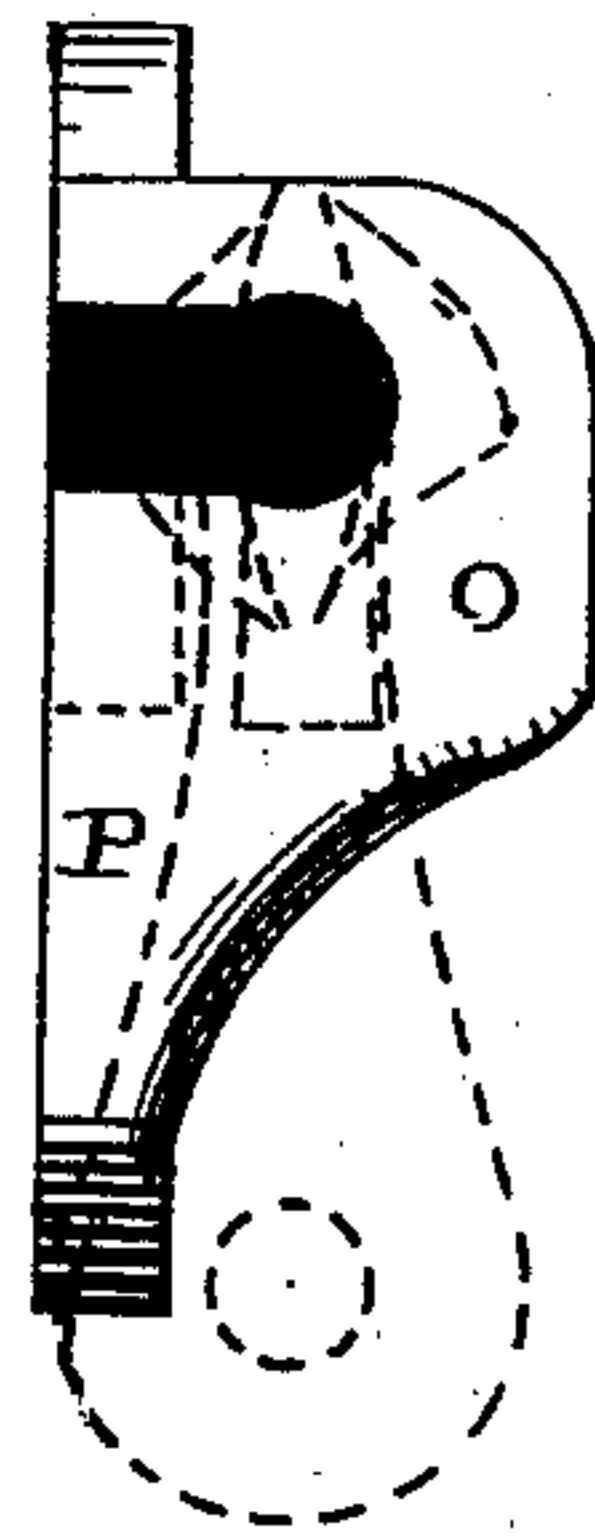
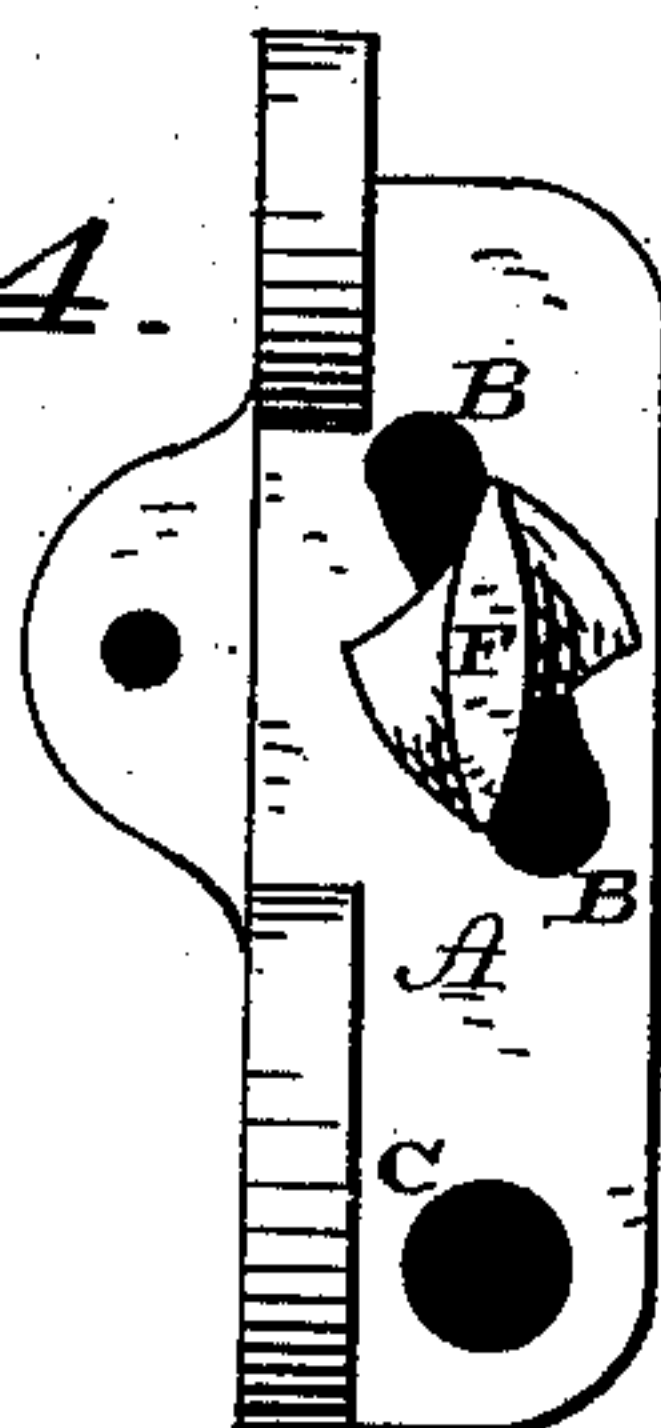


Fig. 4.



- WITNESSES. -
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UNITED STATES PATENT OFFICE.

JAMES HENRY DOUGHERTY, OF WHISTLER, ALABAMA.

LOCK FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 297,239, dated April 22, 1884.

Application filed April 30, 1883. (Model.)

To all whom it may concern:

Be it known that I, JAMES H. DOUGHERTY, of Whistler, in the county of Mobile and State of Alabama, have invented certain new and useful Improvements in Car-Door Fasteners; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-door fasteners; and it consists in the combination of the locking-bolt having its end made screw-threaded, and provided with both a locking-arm and a projection for locking the bolt in position, with a rocking frame and the supporting-frame, through which the bolt is made to pass, and which is provided with a central projection or flange for the projection upon the bolt to catch behind, and thus hold the bolt in any desired position, as will be more fully described hereinafter.

The object of my invention is to provide a fastening for car-doors, by means of which the door can be both locked tightly in place or locked just sufficiently wide open to allow ventilation for the car.

Figure 1 represents a side elevation of my invention, showing the door locked. Fig. 2 represents a similar view, showing the door partially open. Figs. 3, 4 are edge views of the two parts which form the fastener.

A represents a locking-frame, which is to be bolted or otherwise secured to the car at the edge of the door in the usual manner, and which is provided with the slot B, through which the end of the bolt passes, and with the opening C at its lower end, through which the lock is made to pass. The locking-bolt will be made of any desired length, and perfectly round its entire length, except at its end F, which is made in the shape of a screw or worm, and at those two points where the locking-arm G and the projection H are connected to it. The end F is made screw-threaded or in the shape of a worm-gear, so

that when this end has once been passed through the slot in the part A this end will catch behind the part A and prevent the bolt from being withdrawn until the bolt has been partially turned around, so that its end will be brought into a line with the slot through which it passes. In order to turn this bolt around so that its enlarged end can be withdrawn, it is of course necessary to raise the locking-arm G upward, and then the bolt can be moved endwise. As long as the lock is passed through the locking-arm and the hole C in the frame A, of course the bolt cannot be moved, and hence the door cannot be opened. The projection H upon the bolt serves to catch between the two outer flanges, O, formed upon the support P, and the central flange, N, placed midway between them. The two outer flanges have holes through them, so that the bolt can pass freely back and forth between them, while the central flange is cut away at its top, so as to allow the projection H on the bolt to pass freely over its top. When the car-door is closed tightly, the projection catches between the central and the outer flange; but when it is desired to allow the car-door to remain partially open, for the purpose of ventilation, the bolt is turned so that the projection H passes over the central flange and catches between this flange and the inner flange on the support. As this projection is held between these two flanges so that the bolt would be moved endwise, and as the bolt cannot be turned in its bearings on account of the lock, which is passed through the locking-arm and the frame A, it will be readily seen that the door is held rigidly in position, and cannot be opened unless the lock is removed. As the outer end of the locking-bar is made screw or worm shaped, it is always in position, so that when the door is pushed shut the end of the bolt strikes the slot in the frame A, and, passing through the slot, causes the bolt to turn partially around, and then, after the head has passed through the slot, allows the locking-arm to drop back into position. The locking-arm must be raised upward so as to turn the bolt, in order to unlock the door, but

need not be touched when the door is being closed, as the screw-threaded end of the bolt causes it to operate automatically.

Having thus described my invention, I
5 claim—

The combination of the endwise-moving locking-bolt, provided with the locking-arm G, and the projection H, with the locking-frame A, and the support having a flange

upon each of its edges, and a central flange, in 10 between which flanges the projection H is made to catch, substantially as described.

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

JAMES HENRY DOUGHERTY.

Witnesses:

T. TIE DEMAN,
DENNIS RYAN.