(No Model.)

C. C. WARE.

LOCK HINGE.

No. 447,986. Patented Mar. 10, 1891.

Fig. 1.

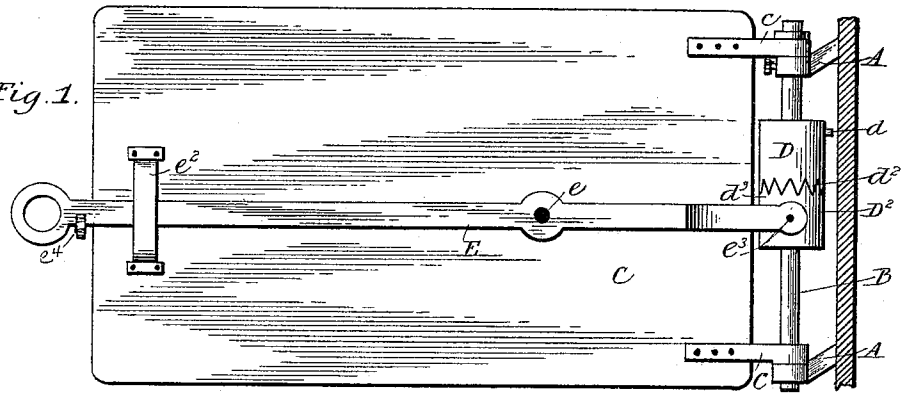


Fig. 2.

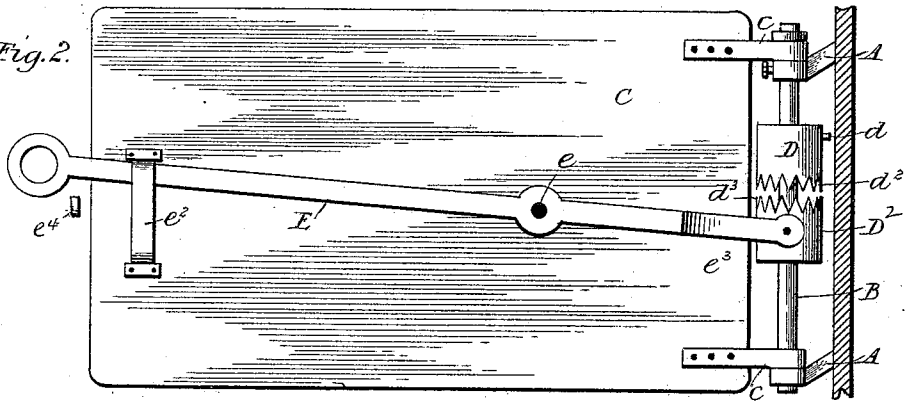
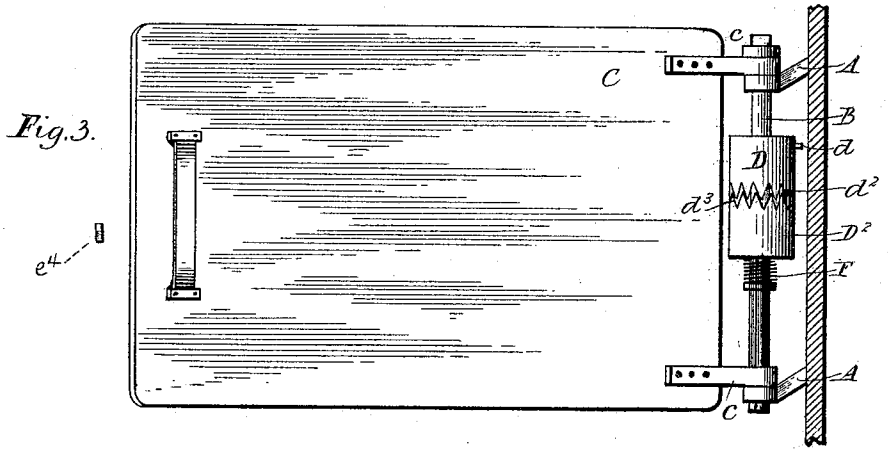


Fig. 3.



Witnesses;
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES C. WARE, OF GLASSBOROUGH, NEW JERSEY.

LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 447,986, dated March 10, 1891.

Application filed August 1, 1890. Serial No. 360,669. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. WARE, a citizen of the United States, residing at Glassborough, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Hinges; 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 appertains to make and use the same.

This invention relates to hinges.

The object of the invention is to produce a hinge designed particularly for use on furnaces or stove-doors, though applicable to all places where it is desirable to regulate the distance which a door is to be opened and to retain it in any position in which it may be placed against displacement by drafts or ordinary pressure.

With this object in view the invention consists, essentially, in a block or cylinder rigidly attached to the front of the furnace or structure to which the door is applied, one surface of the block or cylinder being provided with a series of slanting teeth and a movable block or cylinder provided with similar teeth engaging those of the rigid block or cylinder, the movable block or cylinder being attached to the door and provided with a latch or lever, whereby the movable block or cylinder is capable of being placed into and out of engagement with the rigid block.

Furthermore, the invention consists in various novel details of construction, whereby the objects of the invention are attained.

I have illustrated the invention in the accompanying drawings, in which—

Figure 1 is a front elevation of a furnace-door, the same being shown in a closed position. Fig. 2 is a similar view, the blocks or cylinders being separated in order to allow the free movement of the door; and Fig. 3 is a side elevation of a modified form of hinge, in which the latch or lever is dispensed with and a spring used to retain the teeth of the blocks in engagement.

In the drawings, A represents projections from the front of the furnace or the like receiving a bar B, to which the door C is attached by means of straps *c*. Permanently attached to the rod B is a block or cylinder D, provided with a hole to receive the rod B and attached thereto by a set-screw *d*, projecting through block and the bearing upon the rod B. The lower end or face of the block D is provided with a series of inclined teeth d^2. Below the block D is a corresponding block D^2, which is capable of sliding up and down upon the bar, and is provided with teeth d^3, corresponding with those on the block D. The up-and-down movement of the block D^2 is regulated by a latch or lever E, pivoted at *e* to the front of the door, and held in proper position by a stirrup e^2 and attached to the block D^2 by pin e^3. Thus it will be seen that by an up-and-down movement of the front end of the latch the teeth on the block D^2 may be moved into or out of engagement with those on the block D.

In the modified form shown in Fig. 3, the latch or lever E is dispensed with and a spring F is placed beneath the block D^2 and tends to force the teeth of the block into engagement with those of the upper block.

From the foregoing it will be clear that by my device I provide a ready and simple means for sustaining a door—such as a furnace or stove door—at any desired angle.

The incline of the teeth upon adjacent teeth of the block running upon the block D^2 are so formed that the door may be pushed from any position in which it may be placed, the incline of the teeth being such as to permit this without injury to the hinge.

The outer edge of the latch E extends beyond the edge of the door, and when in a closed position engages the catch e^4 on the front of the furnace or the like, and serves as an ordinary latch.

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

In a hinge for stove, furnace, or other doors, a rod or the like mounted on the structure to which the door is attached, a block or cylinder rigid on the rod and provided with inclined teeth, a sliding block or cylinder on the rod, also provided with inclined teeth, and a latch or lever pivoted to the door and connected with the sliding block or cylinder, substantially as described.

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

CHARLES C. WARE.

Witnesses:

CHARLES AVERY,

JOHN D. SHUTE.