

(No Model.)

G. T. CRANDELL.

STOVE DOOR.

No. 343,986.

Patented June 22, 1886.

Fig. 1.

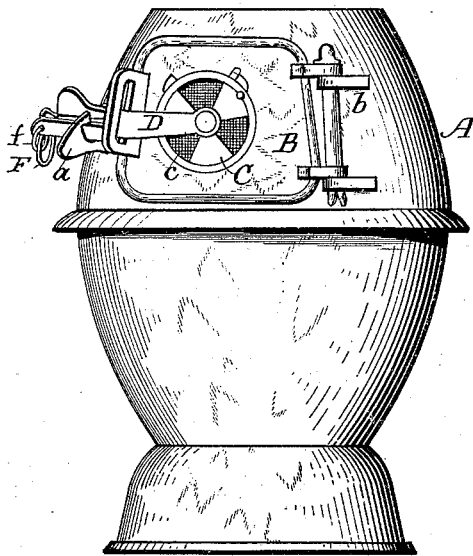


Fig. 2.

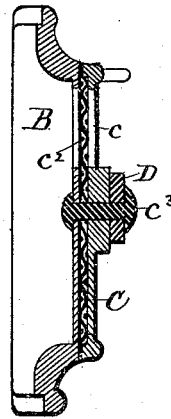


Fig. 3.

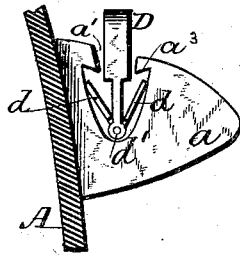


Fig. 4.

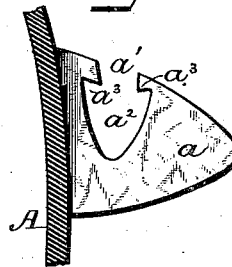


Fig. 5.

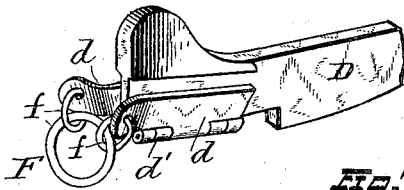


Fig. 6.

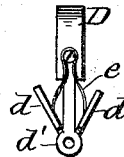


Fig. 7.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE T. CRANDELL, OF OMAHA, NEBRASKA.

STOVE-DOOR.

SPECIFICATION forming part of Letters Patent No. 343,986, dated June 22, 1886.

Application filed November 17, 1885. Serial No. 183,067. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. CRANDELL, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Stove-Doors, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to stove-doors and the latch thereof, and the objects of my improvement are to provide means for preventing the escape of red-hot coals upon the floor or within the body of a car, if on account of an accident the stove become upset, and means for automatically retaining the door latched and secured in whatever position the stove may occupy. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a stove having a catch and door and door-latch constructed in accordance with my invention. Fig. 2 is a central vertical section of the stove-door. Fig. 3 is a vertical section of a portion of the stove, showing the catch in side view and the latch in end view. Fig. 4 is a similar view of the catch with the latch removed. Fig. 5 is a perspective view of one end of the latch. Fig. 6 is an end view of the latch, showing the locking-wings and a spring between them. Fig. 7 is a side view of a hooked handle or poker to release the latch from the catch.

Similar letters refer to similar parts throughout the several views.

A represents the main portion of the egg-shape body of a cast-iron stove provided with my improvement; but said improvement can just as well be applied to stoves of other material and configurations.

The door B is hinged at *b* to the body in the usual manner, and is provided with a revolving draft-regulating door, C, having segmental openings *c* therein of usual construction, the body of the door B having corresponding segmental openings underneath the door C. To prevent small lumps of red-hot coal from escaping through the openings *c*, (in case the stove becomes upset,) a piece of woven wire, *c*², as a screen, is inserted between the doors

C and B, and a loosely-clinched rivet, *c*³, inserted centrally therein and also passing through the inner end of the latch D retains these parts together.

To retain the door B securely latched, the catch *a* has made in its top a narrow vertical slot, *a'*, extending a short distance, from which it is expanded into a triangular opening, *a*², the upper edge of which forms shoulders *a*³ on each side of the slot *a'*, to retain into engagement the two wings *d* that form part of the latch D and are hinged at *d'* to its lower edge, and adjoining the outer end thereof where the sides of the latch are recessed, so that when the wings *d* are folded close to the body of the latch, as when said latch is entering in or issuing from the slot *a'* in the catch, their outer face is even with the side faces of the latch; but as the slightest lateral motion of the latch, while dropping it into the notch of the catch, causes them to open, their normal position is as shown in Figs. 3 and 5—that is, divergent from the body of the latch.

To guard against any possibility of the wings *d* remaining closed, either a coiled spring or a light flat spring, *e*, may be placed between them, as shown in Fig. 6.

To facilitate the closing of the wings and lifting of the latch out of the catch, a loose chain-link, *f*, is inserted into the outer end of each wing, and a large ring, F, is made to pass through the links *f*, so that if the latch happens to be hot the hooked end of a poker or the hook G can be inserted in the ring F, and by elevating it the wings first become closed and a continuation of the movement lifts the latch out of the catch.

Having now fully described my invention, I claim—

1. The combination of a stove-catch having a vertical slot and shoulders projecting inwardly therein with a door-latch and wings hinged thereto, substantially as described.

2. The combination of a catch having a vertical slot and shoulders projecting inwardly therein with a door-latch with wings hinged thereto and the links and ring uniting them, substantially as described.

3. The combination of a door-latch and wings hinged thereto with a catch having a

V or triangular slot and shoulders projecting inwardly therein, substantially as described.

4. The combination of a catch having a vertical slot and shoulders projecting inwardly therein with a door-latch and wings hinged thereto with a spring between said wings, substantially as described.

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

GEORGE T. CRANDELL.

Witnesses:

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JEREMIAH F. FITZGERALD.