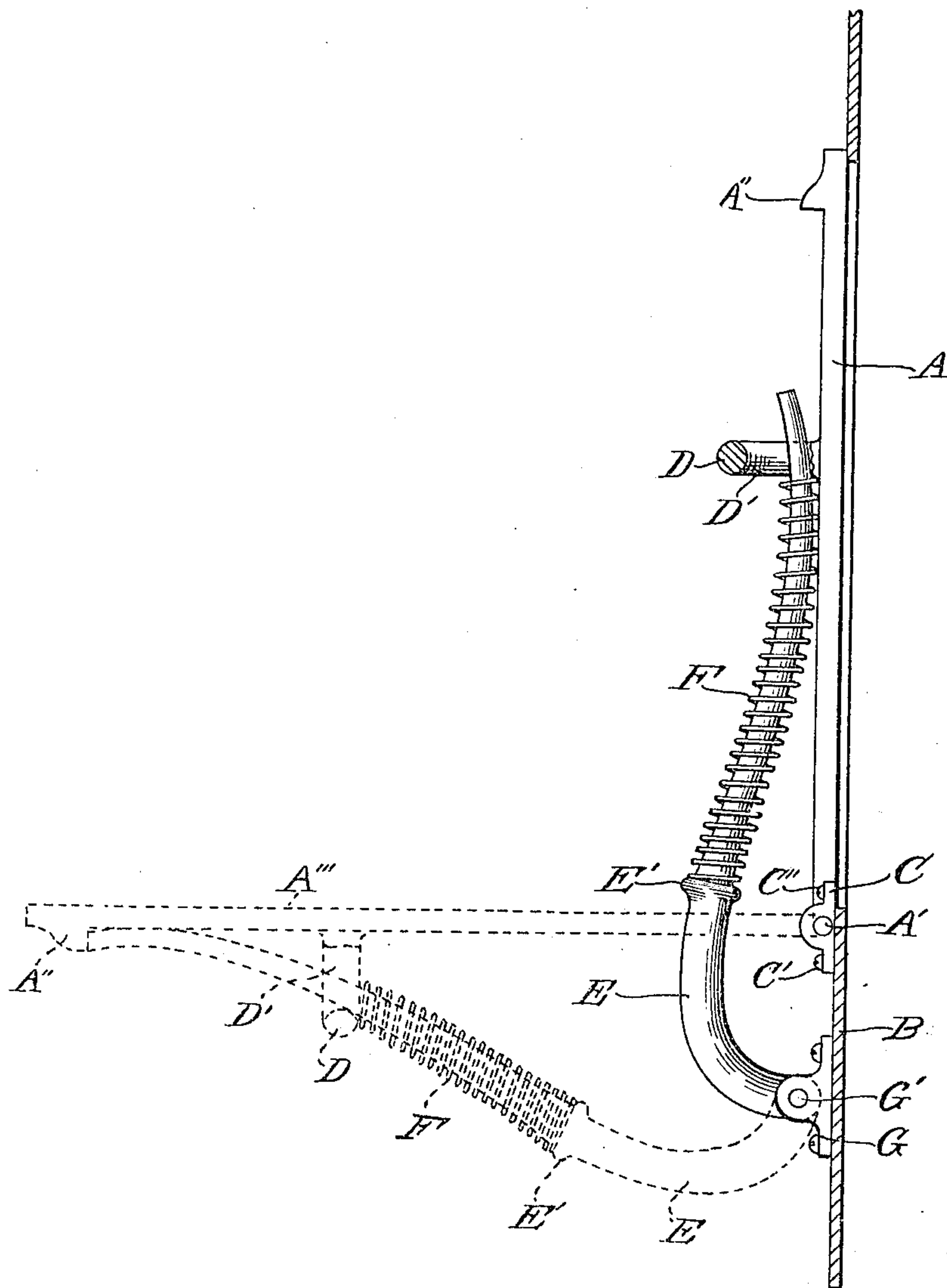


OVEN DOOR FOR STOVES, RANGES, AND THE LIKE.

APPLICATION FILED MAR. 10, 1908.

910,142.

Patented Jan. 19, 1909.




Witnesses:

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# UNITED STATES PATENT OFFICE.

WILLIAM GEORGE MOORE, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO  
GEORGE WOTTEN GADBURY, OF LOS ANGELES, CALIFORNIA.

OVEN-DOOR FOR STOVES, RANGES, AND THE LIKE.

No. 910,142.

Specification of Letters Patent.

Patented Jan. 19, 1909.

Application filed March 10, 1908. Serial No. 420,272.

*To all whom it may concern:*

Be it known that I, WILLIAM GEORGE MOORE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Oven-Door for Stoves, Ranges, and the Like, of which the following is a specification.

My object is to produce an oven-door for stoves, ranges, and the like, which will carry any heavy load that is to be inserted into or removed from the oven, and which is cushioned by a spring of suitable strength to prevent slamming of the doors and breaking the castings; and my invention consists in the combination with a stove, range, or the like, of a door hinged to swing on horizontally-aligned trunnions or hinges from a horizontal or open position upwardly to a vertical or closed position, and vice versa; a brace hinged to the stove independently of the door and slidingly connected to the door, a spring mounted upon the brace between the door and a shoulder, and a stop to prevent the door from going below a horizontal position.

The principles of my invention may be applied to seats, shelves, brackets, car-doors, and the like, and I do not wish to limit my claims to an oven-door.

The accompanying drawing illustrates the invention as applied to a stove.

The figure is an end elevation of a stove-door embodying the principles of my invention, the bulk of the stove being broken away.

The door A is provided with trunnions A' at its lower corners, and is attached to the stove-frame B by the straps C, said straps being located just below the oven-opening so that the door will swing upwardly and close the opening, or swing downwardly to a horizontal position and provide a shelf leading into or out of the oven.

The rivets or screws for attaching the hinges to the stove are represented by C', C''. A lug projects forwardly from the upper part of the door A to form the bearing D through which there is an opening D', and near the upper edge of the door in line with the opening D' is a stop A''. The brace E is pivotally secured to the framework of the stove by the trunnion G operating in the bearing G; said bearing being riveted to the stove, and the brace has sufficient

curve so that it will move freely through the bearing D without striking the face of the door as the door moves up and down, as indicated in dotted lines. A shoulder E' is formed upon the brace E. The expansive coil spring F is mounted upon the brace E between the shoulder E' and the bearing D, the tension of said spring being exerted to serve as a cushion to ease the door down from its vertical position to its horizontal position; and the brace being of suitable length to engage the stop A'' and hold the door in its horizontal position, said brace being strong enough to carry any load which it is desired to insert into or remove from the oven. The tension of the spring is not sufficient to raise the door, but it is sufficient to serve as a cushion to check the fall of the door.

In practical operation the stop A'' may be used as a handle to be manually engaged to open the door or swing it downwardly from its horizontal position. The door may be held in its elevated position by a latch or any suitable means. When the door is unlatched it may be moved downwardly to the horizontal position indicated by dotted lines A'' against the tension of the spring F; the force of the spring being exerted to check the fall of the door until the brace E engages the stop A''.

Where the principles of my invention are applied to devices other than stove-doors, the door A becomes a body mounted to swing from a vertical to a horizontal position, and vice versa, and said body may be a seat, shelf, bracket, or the like.

The hinge-pivots are preferably in a common vertical plane. The brace is bent to extend downwardly aslant away from the plane of the hinge-pivots when the body is upright, and is slidable in the bearing and extends therethrough to engage the stop when the body is lowered, and the spring is carried by a portion of the arm between the bearing and the brace-hinge, and engages the bearing, to be compressed thereby as the body and brace lower. The spring is of sufficient length to act against the bearing when the body is in its upright position above the pivots of the hinges by which the body and the brace are secured to the support B. The spring may be adjusted to exert greater or less force, as may be required, to hold the body in the upright position to which it may



be brought as indicated in the view, where the center of gravity is approximately in vertical relation to the pivot of the body.

I claim:—

5 1. The combination with a stove-door, of a bearing projecting forwardly from the upper part of the door, a stop upon the door above the bearing, a brace adapted to be hinged to the stove below the stove-door and  
10 slide through the bearing, a stop upon the brace, and a spring between the bearing on the door and the stop on the brace to serve as a cushion to check the fall of the door.

15 2. The combination with a stove-door adapted to be mounted on horizontally-aligned hinges, of a bearing projecting forwardly from the upper part of the door, a stop above the bearing, a brace adapted to be hinged to the stove below the stove-door and  
20 sliding through the bearing to be engaged by the stop, a stop upon the brace, and a spring between the bearing on the door and the stop on the brace.

3. The combination with a stove - door

adapted to be mounted on horizontally- 25  
aligned hinges, of a bearing projecting forwardly from the upper part of the door, a stop above the bearing, a brace adapted to be hinged to the stove below the stove-door and  
30 sliding through the bearing to be engaged by the stop, a shoulder upon the brace, and a spring between the bearing on the door and the shoulder on the brace.

4. A support, a body and a brace hinged thereto one above the other, the body being 35  
provided with a bearing and a stop and the brace being bent and slidably extended through the bearing to engage the stop, when the body is lowered and extending aslant downward away from the plane of the hinge 40  
pivots when the body is upright, and a spring carried by the brace and acting upon the bearing to cushion the body in its descent.

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Witnesses:

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