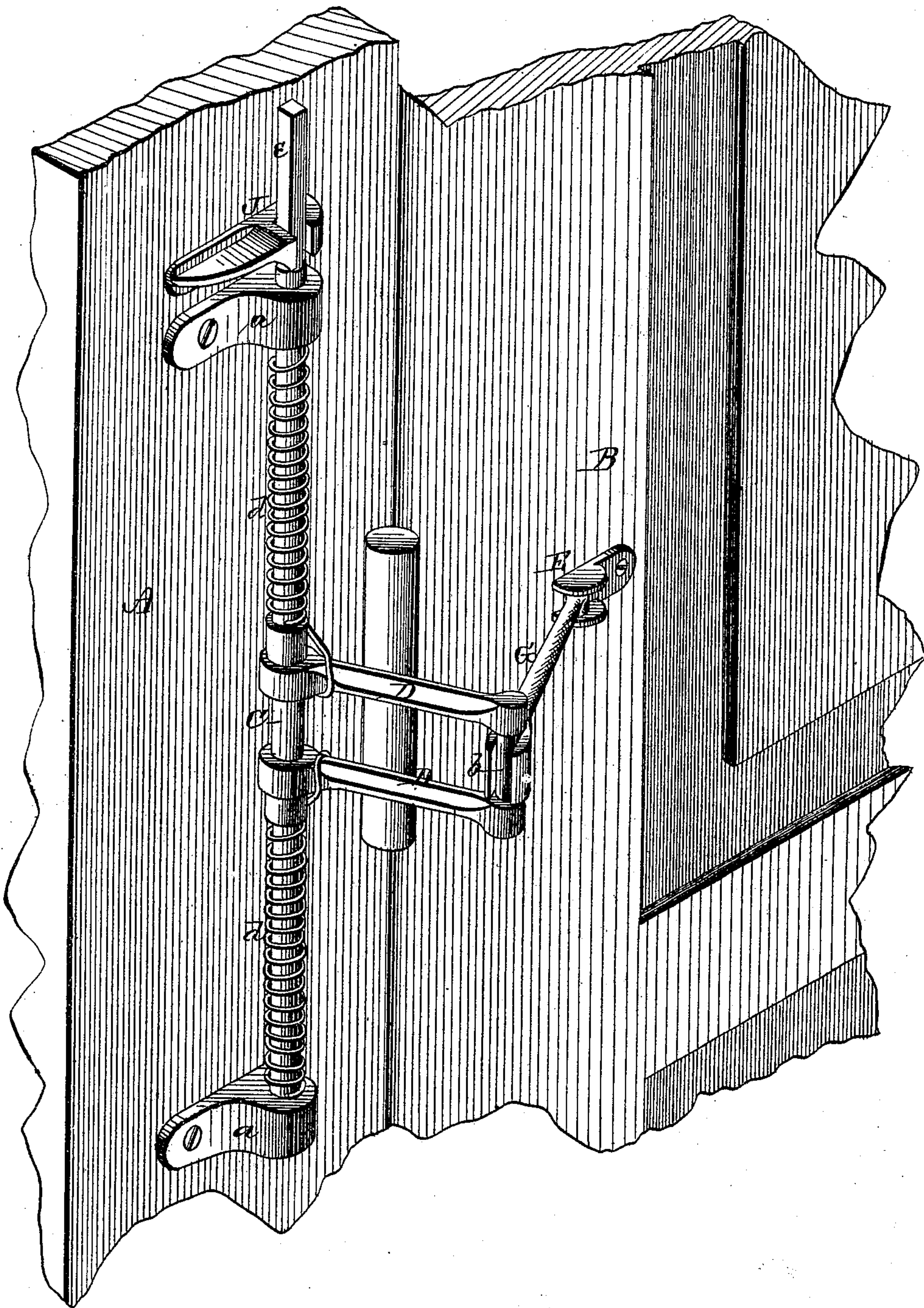


A. B. CHATFIELD.

DOOR-SPRING.

No. 171,549.

Patented Dec. 28, 1875.



WITNESSES

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ALONZO B. CHATFIELD, OF ANAMOSA, IOWA.

IMPROVEMENT IN DOOR-SPRINGS.

Specification forming part of Letters Patent No. **171,549**, dated December 28, 1875; application filed July 19, 1875.

To all whom it may concern:

Be it known that I, ALONZO B. CHATFIELD, of Anamosa, in the county of Jones and in the State of Iowa, have invented certain new and useful Improvements in Door-Springs; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a door-spring, comprising a rod secured in castings on the door-frame, and having springs coiled around it; also, having two loose arms, which are connected together, and are fitted against the bifurcated end of a bar, which is hinged to a bracket on the door, all as will be hereinafter more fully set forth.

The annexed drawing represents a perspective view of my invention applied to a door.

A represents a part of a door-frame, with door B hinged thereto. C represents a rod, journaled vertically in boxes *a a*, which are fastened to the door-frame, in such position that the rod will be about one inch from the hinged edge of the door. On the rod C, near the middle, are two loose projecting parallel arms, D D, connected at their outer ends by a round cross-bar, *b*. On the door B is secured a bracket, E, formed with two ears, with a pin or round bar between them. G is a bar or arm, having forked ends, which are placed on the pin in the bracket E and on the cross-bar *b*. The bracket E should be secured to the door at such a point that when the door is opened fully said bracket, with the end of the

bar G placed therein, shall pass through between, and project slightly beyond, the arms D D. *d d* are spiral springs, placed one on each end of the rod C, the inner end of each spring being attached to the adjoining arm D, while the outer end is made fast to the rod. The rod C is prevented from turning in its bearings by having its upper end *e* made square, and inserted between two jaws on a detachable clamp, J, which bears against the door-frame, thus holding the rod.

By removing the clamp J the rod C may be turned with a wrench in its bearings to give the springs *d* more or less tension, and when the springs are thus regulated the clamp J is put on again, holding the rod.

By the construction of my invention, as described, it will be seen that the tendency of the springs is to hold the door closed, and when fully opened the springs will hold the door open.

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

The combination of the rod C, stationary in the boxes *a a*, loose arms D D, with connecting-bar *b*, springs *d d*, bar G, and bracket E, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of June, 1875.

ALONZO B. CHATFIELD.

Witnesses:

C. W. COE,

CHARLES SMITH.