

S. L. BIGNALL.  
Door-Hangers.

No. 143,557.

Patented Oct. 14, 1873.

FIG I.

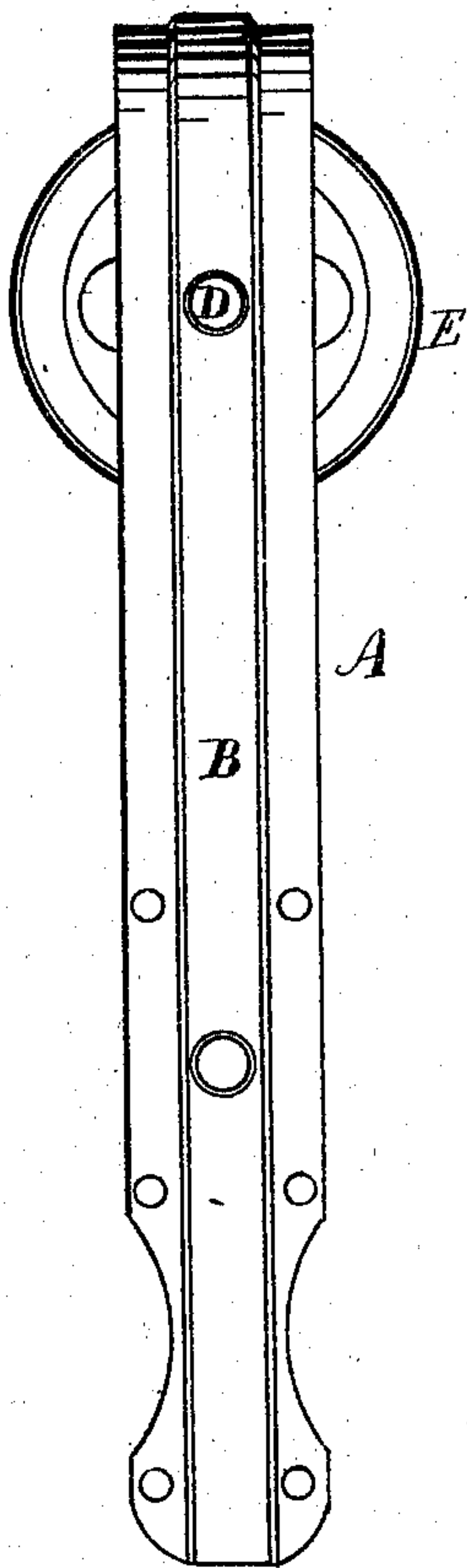


FIG II.

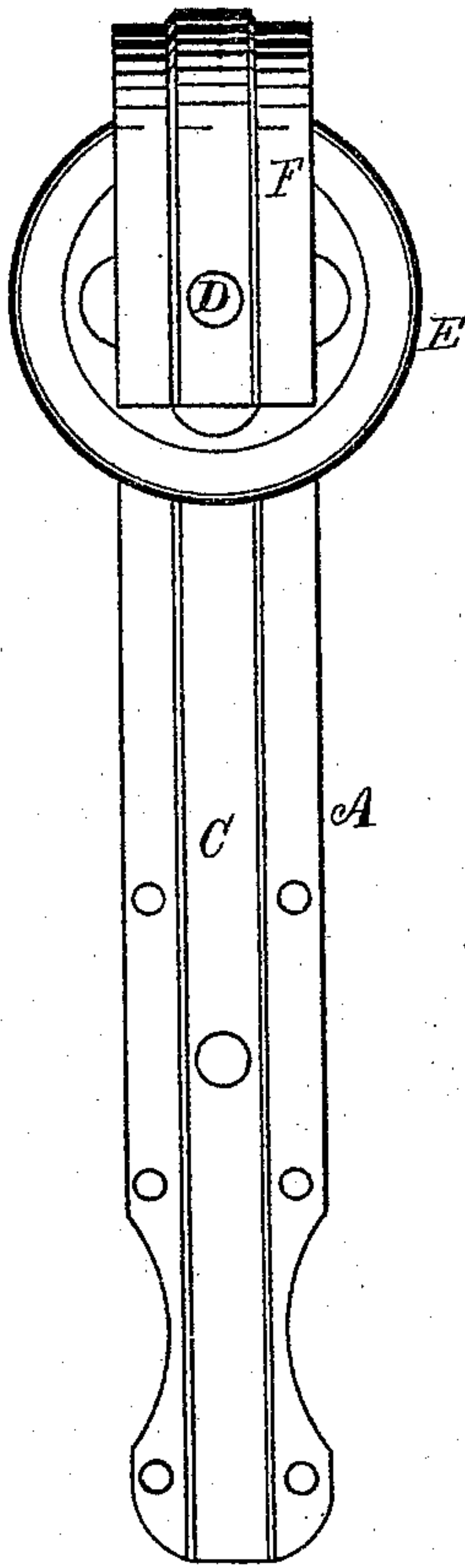
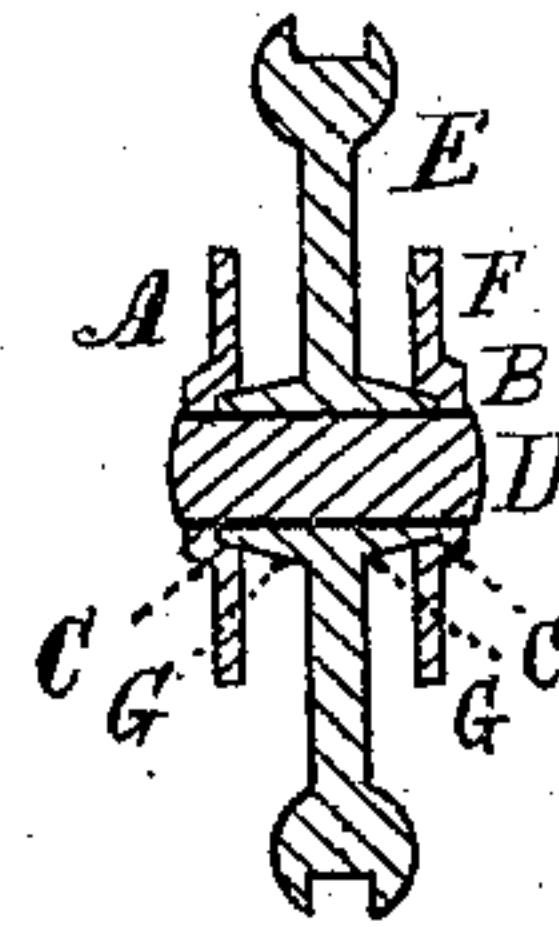


FIG III.



WITNESSES.

*Geo L. Chopin*  
*Geo L. Owen*

INVENTOR.

*Solomon L. Bignall*

# UNITED STATES PATENT OFFICE.

SOLOMON L. BIGNALL, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN DOOR-HANGERS.

Specification forming part of Letters Patent No. **143,557**, dated October 14, 1873; application filed June 23, 1873.

*To all whom it may concern:*

Be it known that I, SOLOMON L. BIGNALL, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Barn-Door Hangers, of which the following is a specification:

The present invention relates to that class of barn-door hangers arranged to run the door suspended from a track on which an anti-friction roller runs; and its nature consists in a wrought-iron strap rolled to form an internal groove, and bent at its top part to form bearings for the pivot of the roller, and to bring the grooves in the two ends in facing positions to support the hub of the roller, and prevent it from having a lateral movement, as hereinafter fully described and shown.

In the drawings, Figure 1 is an elevation of the outside of my improved barn-door hanger; Fig. 2, an inside elevation thereof; Fig. 3, a horizontal section of the device through the pivot of the roller looking downwardly.

A represents a wrought-iron strap, which is rolled to form a groove, C, on one side and a rib, B, on the other, and provided with suitable holes for fastening it to a door, and holes to receive a pivot, D. The roller E is provided with the usual groove in its periphery to run

a track, and its hub G is tapered outwardly to fit the groove C in the two ends of the strap A, as shown at Fig. 3.

The difficulty in attaining a door-hanger, in which the roller will remain in a vertical position after it has been in use, consists in the wear of the pivot by the lateral strain of the roller, causing the latter to get out of line, and soon cease to be operative.

By means of groove C and the hub G extending into it, a simple, cheap, and effectual means is provided to hold the roller upright by additional bearings.

In putting the parts together, the upper part of the strap is bent over parallel to the long part, and the hub is put in the grooves, after which the pivot D is put through the holes and headed down, and the device is complete.

I claim and wish to secure by Letters Patent—  
The wrought strap A, provided with a groove, C, and bent over at its top to receive the hub G of the roller E, and to support the pivot D, as and for the purpose set forth.

SOLOMON L. BIGNALL.

Witnesses:

G. L. CHAPIN,  
J. H. ELLIOTT.