

(No Model.)

W. CRONK.  
DOOR HANGER.

No. 427,838.

Patented May 13, 1890.

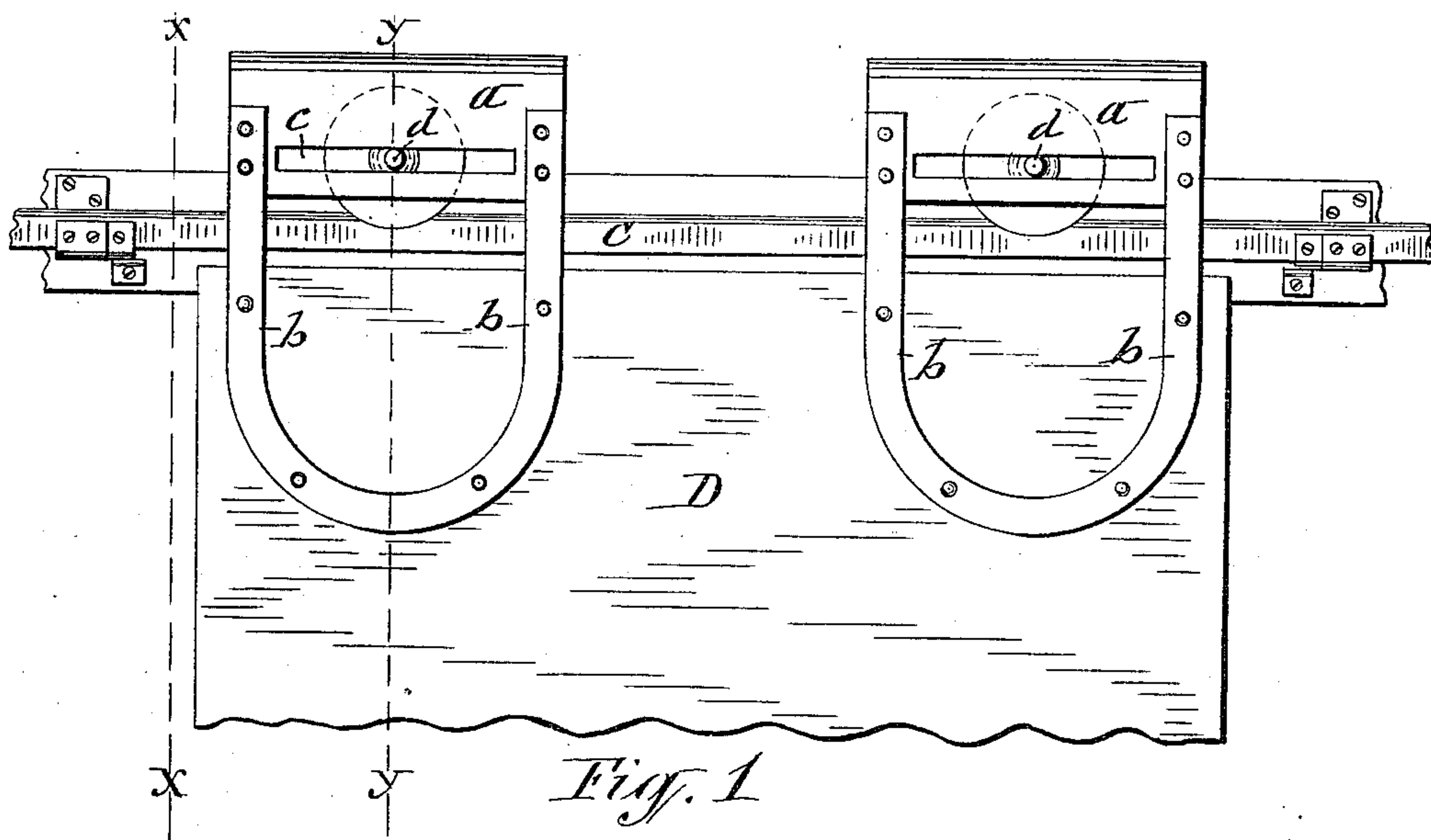


Fig. 1

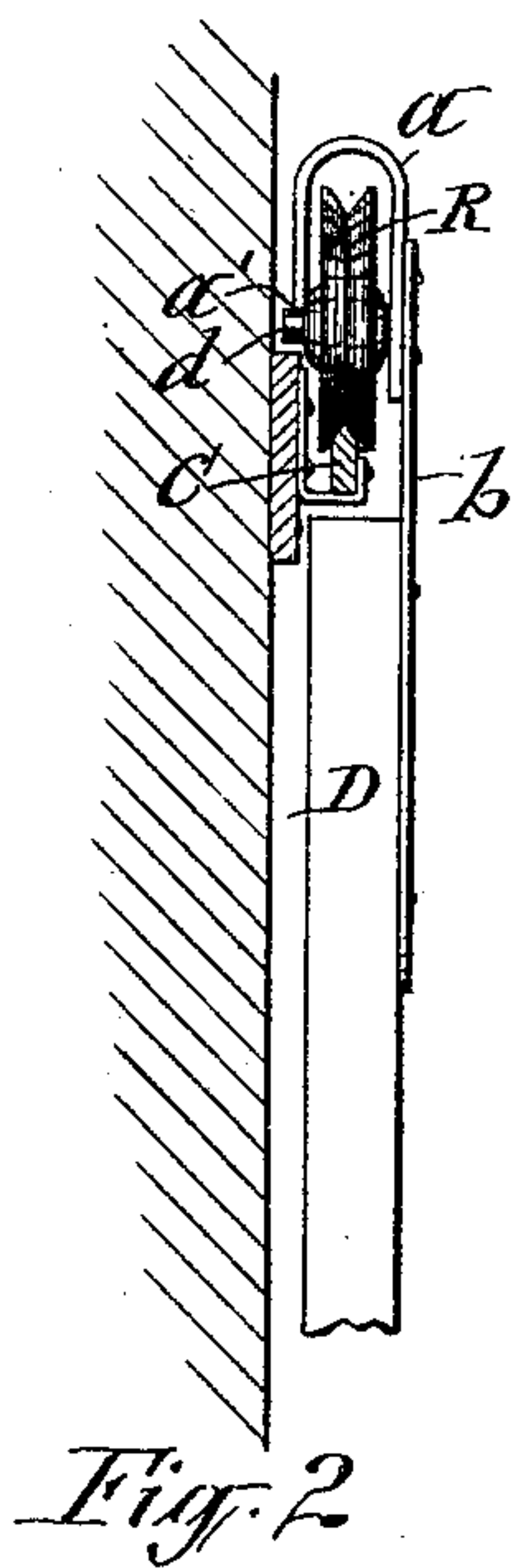


Fig. 2

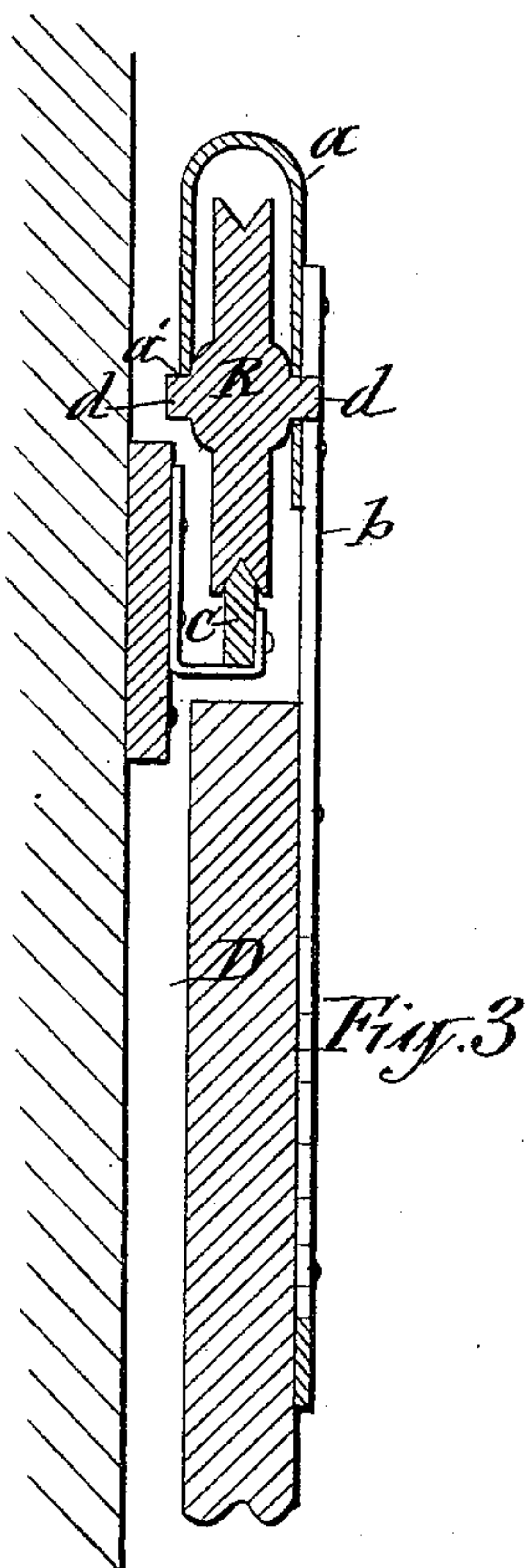


Fig. 3

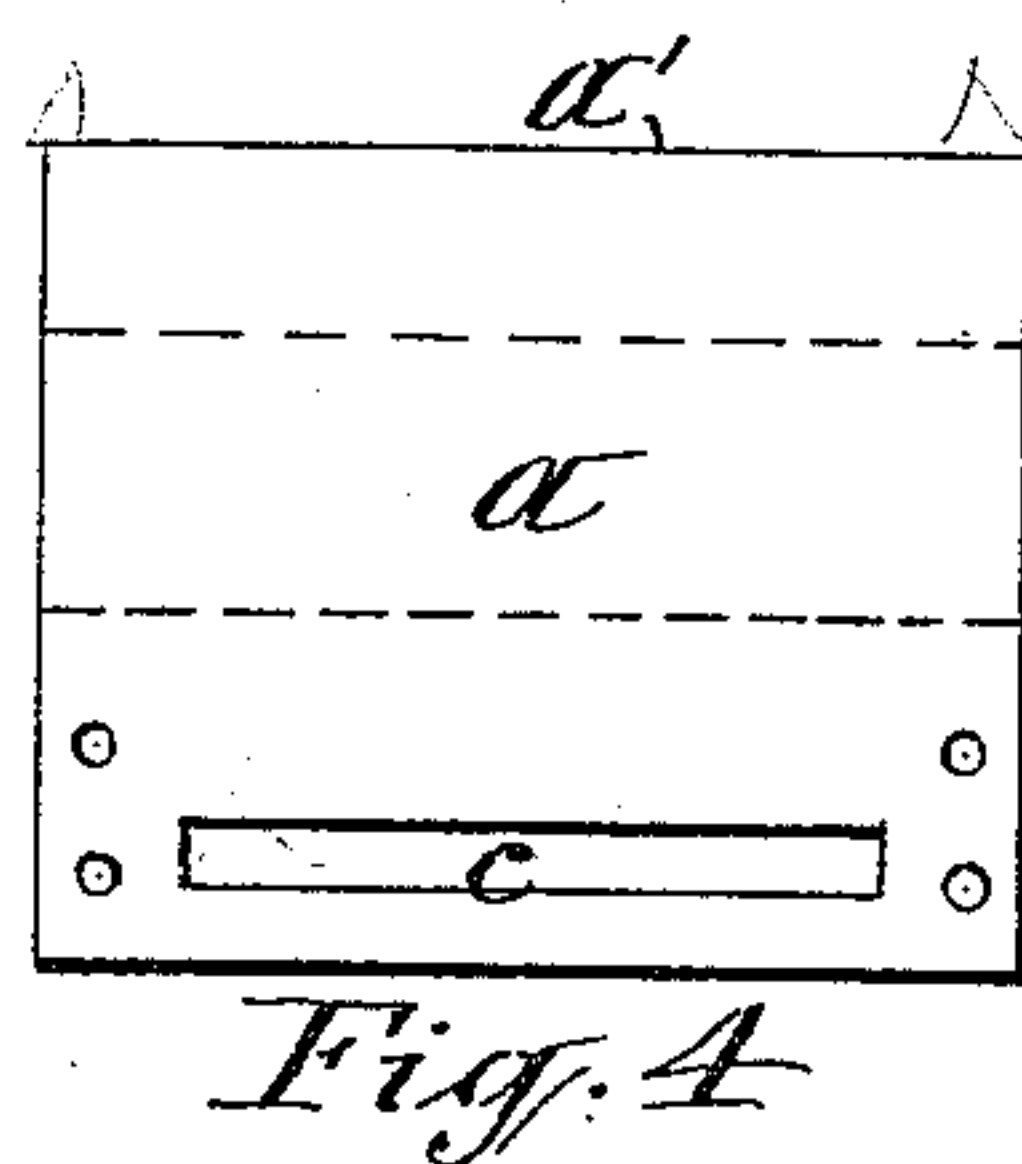


Fig. 4

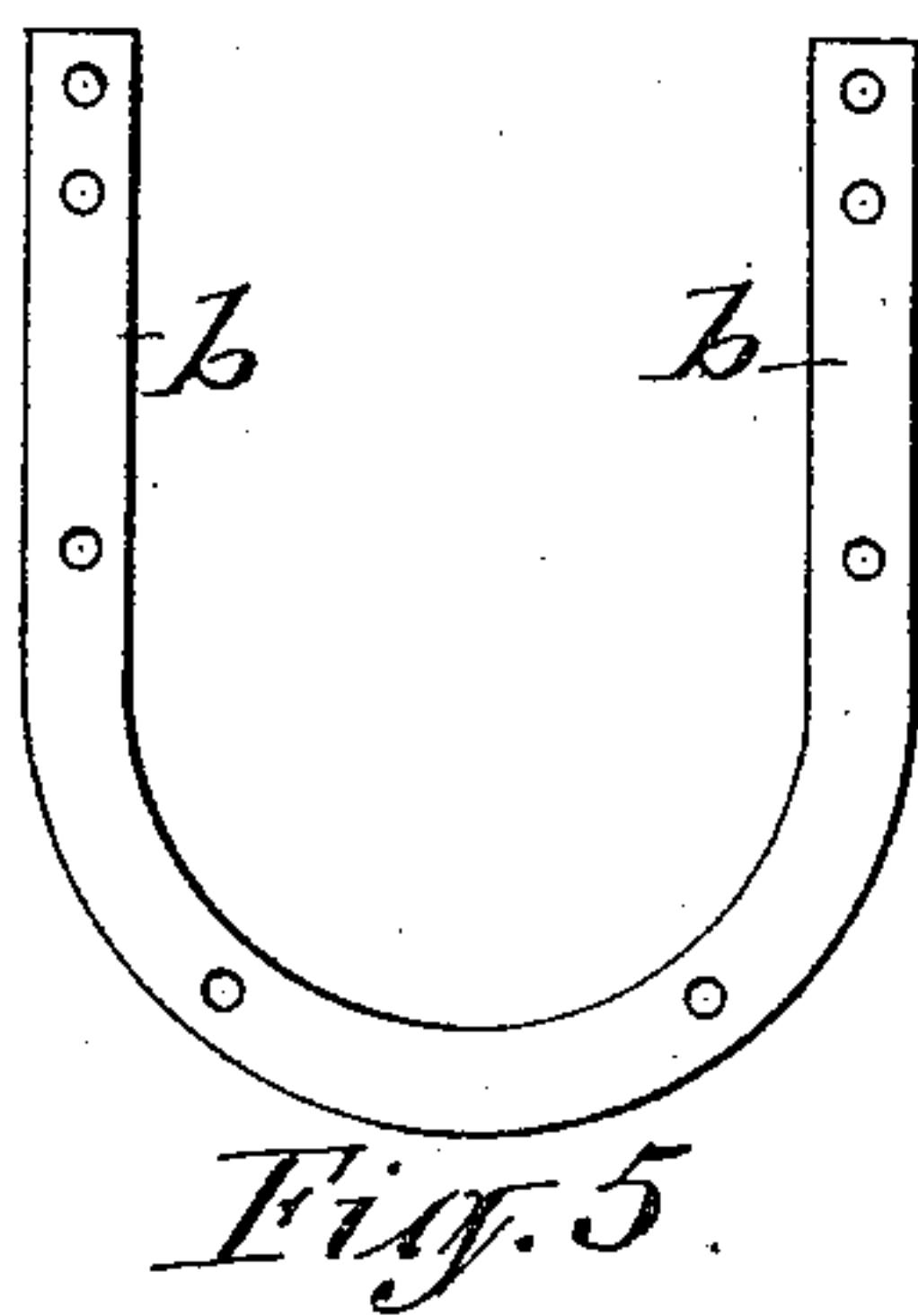


Fig. 5

WITNESSES:

A. F. Walz  
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# UNITED STATES PATENT OFFICE.

WILLIAM CRONK, OF HAVANA, NEW YORK.

## DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 427,838, dated May 13, 1890.

Application filed September 5, 1889. Serial No. 323,090. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM CRONK, of Havana, in the county of Schuyler, in the State of New York, have invented new and useful  
5 Improvements in Door-Hangers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of door-hangers in which the door is suspended from  
10 a rider-bar mounted on the axle of a roller which travels on an overhead track; and the invention consists in a novel construction of said rider-bar, which is formed of a plate of  
15 sheet metal having a straight longitudinal edge and a straight longitudinal slot near the opposite edge and parallel with said straight edge, and the plate being bent transversely to bring the said edge in the same horizontal  
20 plane with the upper edge of the aforesaid, slot, all as hereinafter more fully described and specifically set forth in the claims.

In the annexed drawings, Figure 1 is a front view of the top portion of a door provided  
25 with my improved door-hanger. Fig. 2 is a vertical transverse section on line *x x*, Fig. 1. Fig. 3 is an enlarged vertical transverse section on line *y y*, Fig. 1. Fig. 4 is a plan view of the blank from which the rider-bar is  
30 formed, and Fig. 5 is a plan view of one form of frame or door-suspending straps adapted to be employed in connection with my improved rider-bar.

Similar letters of reference indicate corresponding parts.

D represents the door; C, the overhead track, which may be secured in its position in any suitable and well-known manner; and R R denote the roller or sheaves, which are  
40 mounted on the track and carry the door in a suspended position. For each of said rollers I employ one of my improved door-hangers, which consists of suitable hanger-straps *b b*, preferably formed in one piece of a metal  
45 bar bent U shape and perforated for the reception of screws, by means of which it is attached to the upper portion of the door in such a position as to cause the extremities of the said bar to project above the top of the  
50 door. Said extremities are also perforated for the reception of rivets, by which the rider-

bar *a* is attached thereto. This rider-bar I form of a plate of sheet metal, which I provide with two parallel straight longitudinal edges or with one of said edges along one side  
55 of the plate, as shown at *a'*, and with a straight slot *c* along the opposite side of the plate and parallel with the aforesaid edge, as shown in Fig. 4 of the drawings. Said plate I bend transversely on a line midway between  
60 the aforesaid parallel edges thereof and parallel therewith, and preferably U shape in cross-section, and in such a manner as to bring the straight edge *a'* in the same horizontal  
65 plane with the upper edge of the slot *c*. This rider-bar I rivet at the ends of the side containing the slot *c* to the ends of the hanger-straps *b b*, and in hanging the door the said rider-bar is slipped over the top of the roller  
70 R, and one of the trunnions or ends of the axle *d* thereof is inserted into the slot *c*, and when this is effected, with the roller mounted on the track C, the door is carried in a suspended position by the straight edge *a'* and  
75 upper edge of the slot *c* riding on the trunnions or axle at opposite sides of the roller, as shown in Figs. 2 and 3 of the drawings.

The described rider-bar formed of a single plate of sheet metal bent transversely, so as to extend across the top and down at opposite  
80 sides of the roller R, forms a housing for the latter and a truss of great rigidity, and is easily and cheaply manufactured.

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

As an improved article of manufacture, the door-suspending rider-bar *a*, formed of a plate of sheet metal, having the straight edge *a'* and the straight slot *c* near the opposite edge and  
90 parallel with the aforesaid straight edge, and said plate bent transversely to bring the said straight edge in the same horizontal plane with the upper edge of the slot *c*, substantially as described and shown.

In testimony whereof I have hereunto signed my name this 3d day of September, 1889.

WILLIAM CRONK. [L. s.]

Witnesses:

ELMER L. CRONK,  
E. A. DUNHAM.