(No Model.)

M. C. RICHARDS.

DOOR HANGER.

No. 344,288. Patented June 22, 1886.

Fig. 1.

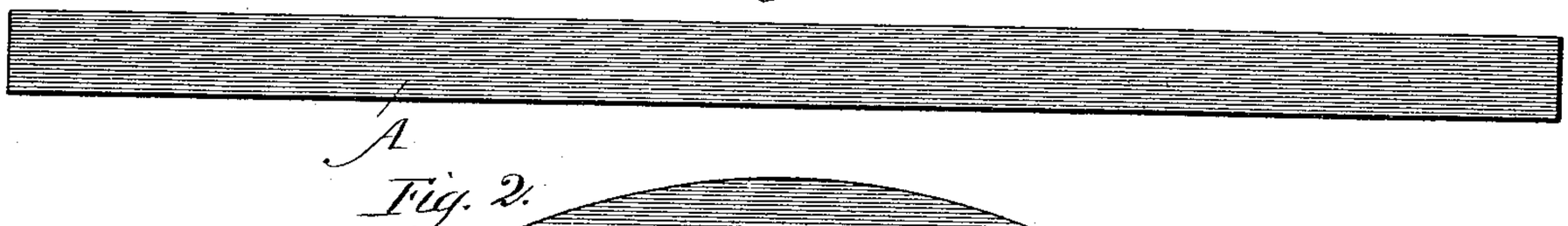


Fig. 2.

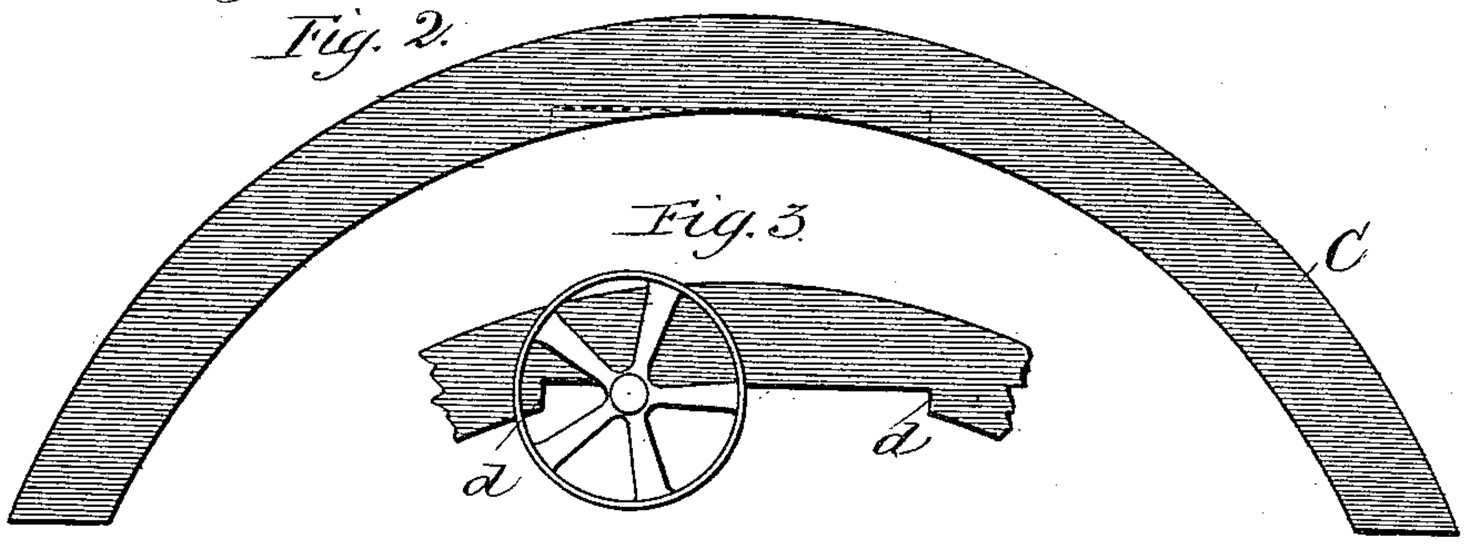


Fig. 3.

Fig. 4.

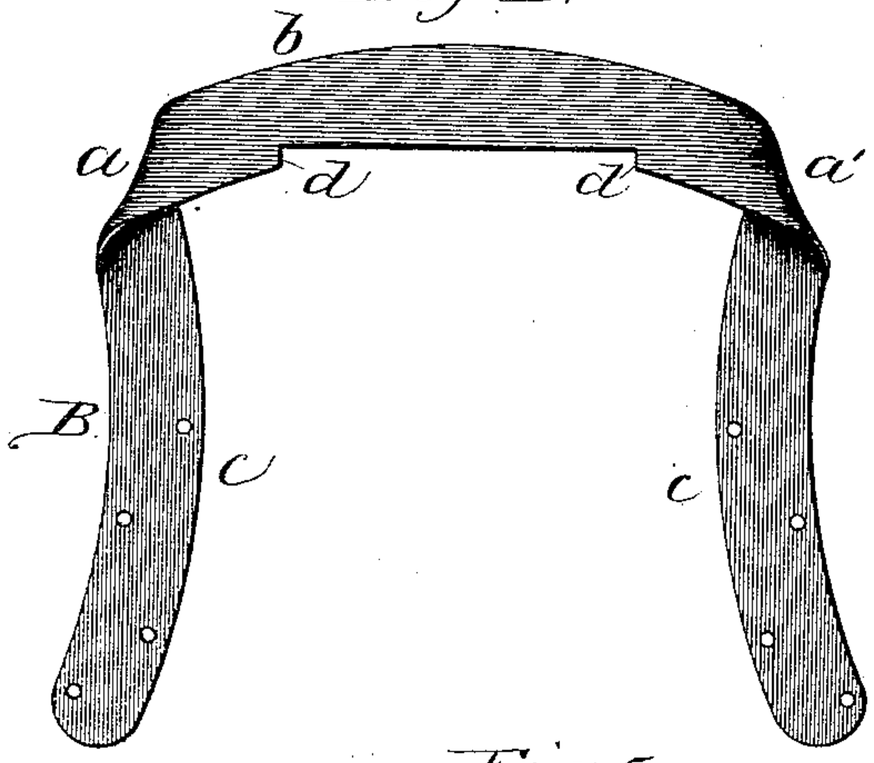


Fig. 6.

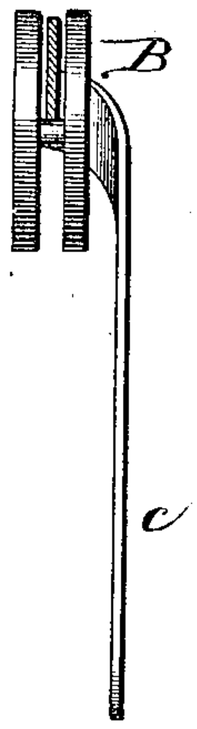
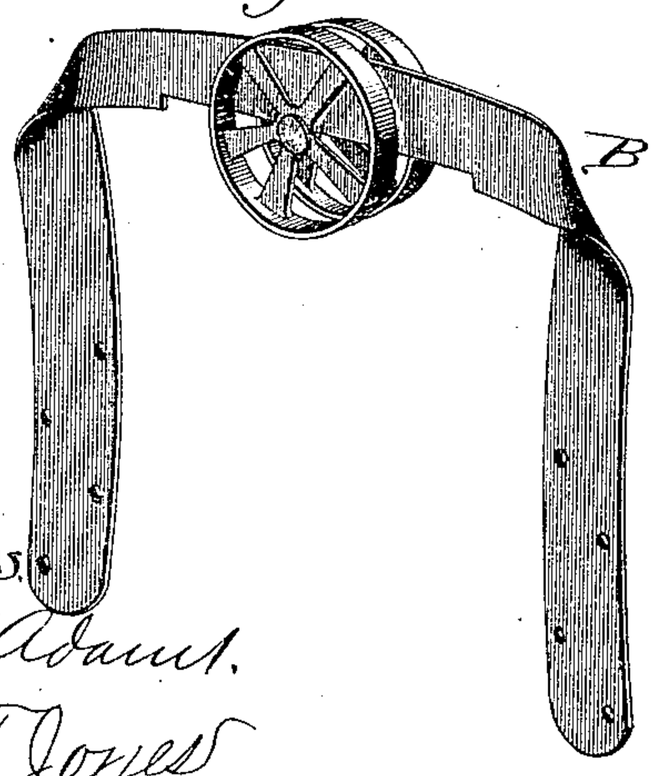


Fig. 5



Witnesses.
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UNITED STATES PATENT OFFICE.

MARCIUS C. RICHARDS, OF AURORA, ILLINOIS, ASSIGNOR TO HIMSELF AND THE WILCOX MANUFACTURING COMPANY, OF SAME PLACE.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 344,288, dated June 22, 1886.

Application filed November 19, 1885. Serial No. 183,284. (No model.)

To all whom it may concern:

Be it known that I, MARCIUS C. RICHARDS, residing at Aurora, in the county of Kane and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Door-Hangers, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 represents a strip of metal from which my hanger is made. Fig. 2 is the form into which I first preferably bend such strip; Fig. 3, a detail showing the stops for the axle of the wheel. Fig. 4 is an elevation showing the hanger complete. Fig. 5 is a perspective showing the hanger and a double roller. Fig. 6 is an edge view with a double roller and a hanger in section.

My door-hanger is primarily designed to be used with heavy sliding and hanging doors for barns and other buildings. It is common to make such door-hangers of metal, consisting of a bar called a "rider-bar," which rides upon the axle of a roller, and one or more pendants connected with such rider-bar, which pendants are to be secured to the door.

The leading object of my invention is to construct a door-hanger in which the rider-bar and pendants shall be formed from a single piece of steel or iron so formed that the rider-bar will be carried to one side of the pendants far enough to engage with the axle of a two-wheeled roller, dispensing with rivets and welding and making a cheap, durable, and efficient hanger, which I accomplish as illustrated in the drawings and hereinafter described.

In the drawings, A represents a bar of metal, which for heavy doors may be about one-quarter of an inch thick and about an inch and seven-eighths (more or less) in width and long enough to form the rider-bar and pendants of the hanger.

B, Figs. 4 and 5, represents a completed hanger.

To make the most improved form of my hanger, I first bend the bar A into substantially the form shown in Fig. 2, C, and afterward bend the curved bar at or near the points *a a'* over a suitable former, giving to the metal the form shown in Figs. 4 and 5, in which *b* serves the purpose of a rider-bar and *c* are the pendants, which are to be secured to the door. I provide the rider-bar with stops *d* for the axle of the roller by cutting out from the center of the bar two pieces, as indicated by dotted lines in Fig. 2. In consequence of the curvature of the bar C, I am able to provide these stops by cutting out a portion of the metal without weakening the same at the center, where the greatest strain comes. If the bar were straight and the stops were made by cutting out a piece of the metal, the cut-away portion would be of the same size throughout its length and the center of the bar would be weakened. If it were not for this the hanger might be made from a straight bar as well as from a curved bar.

With my hanger I use a double wheel, which is common. In Fig. 6 I have shown such double wheel and the position of the hanger when applied thereto. The door is to be secured to the hanger as usual.

The single bar from which my hanger is made is so bent that the rider-bar and pendants are not in the same vertical plane; hence the rider-bar can rest upon the axle of a wheel which is not in line with the pendants.

Heretofore a door-hanger has been composed of a cast-metal frame formed with diagonal laterally-extending end pieces connecting the frame with the ends of a horizontal rider-bar, and such therefore I disclaim.

What I claim as new, and desire to secure by Letters Patent, is—

A door-hanger swaged up from a single piece of metal with a cut-out space in the rider-bar portion *b* to form stops, and twisted ends bent downward to form pendants *c*, the rider-bar and pendants being in different planes, whereby the pendants can be secured to a door and the rider-bar can rest upon the axle of a wheel which is not in line with the pendants, substantially as specified.

MARCIUS C. RICHARDS.

Witnesses:

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