No. 763,393. PATENTED JUNE 28, 1904.

C. E. HARRINGTON.

DOOR HANGER.

APPLICATION FILED OCT. 21, 1903.

NO MODEL.

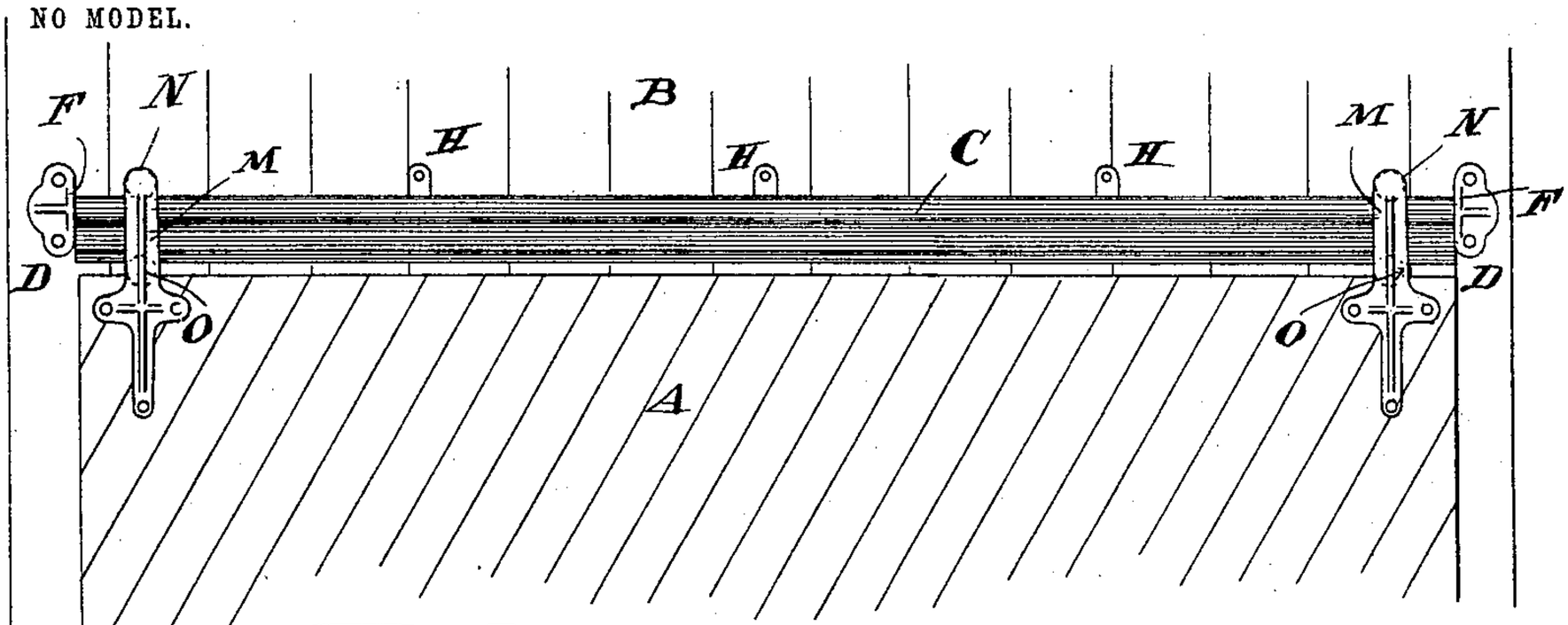

FIG. 1.

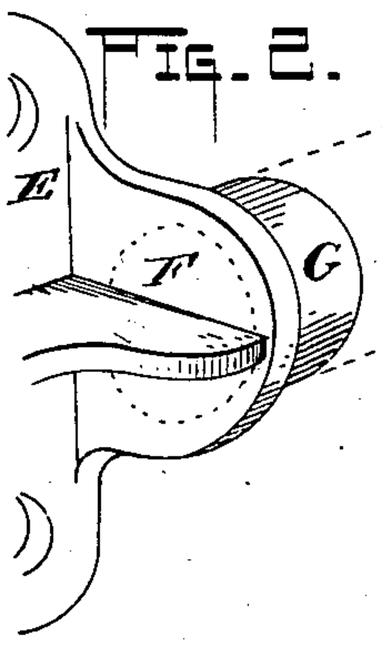

FIG. 2.

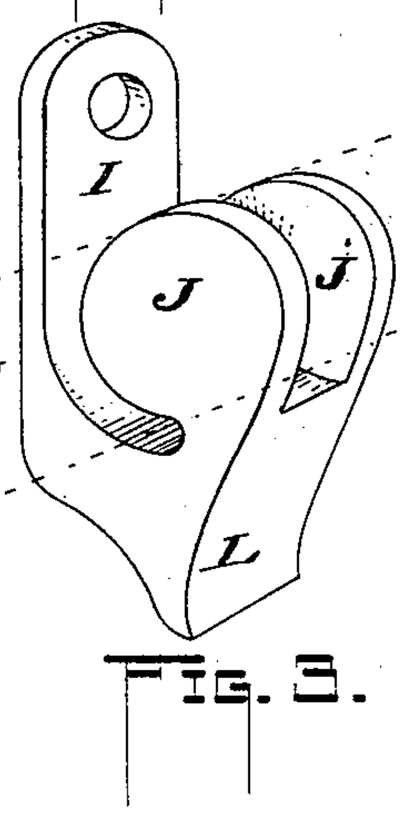

FIG. 3.

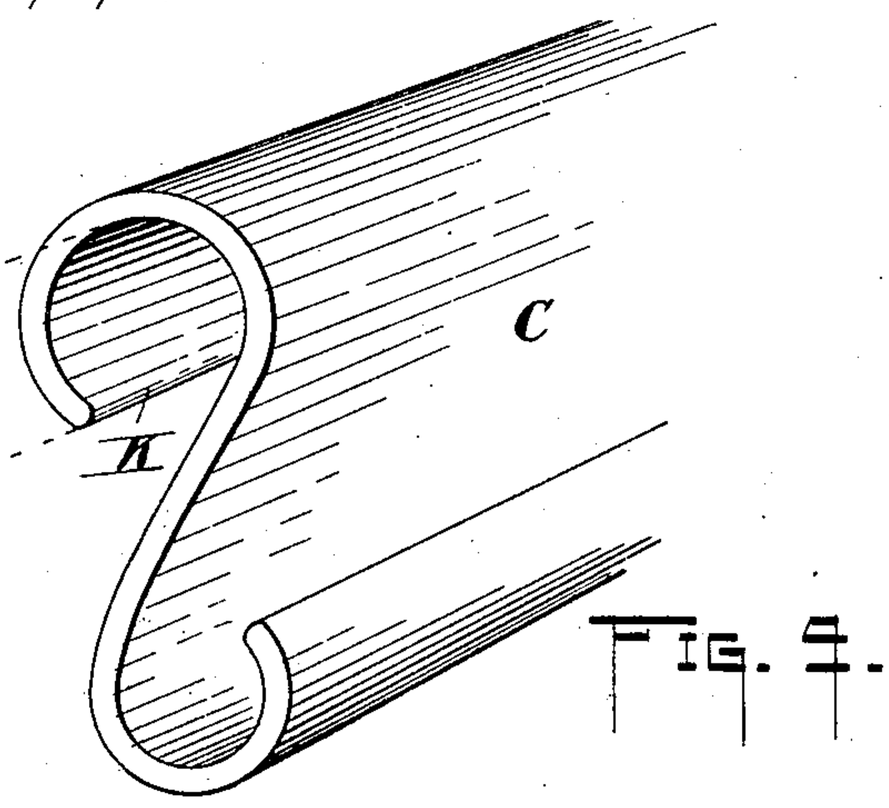

FIG. 4.

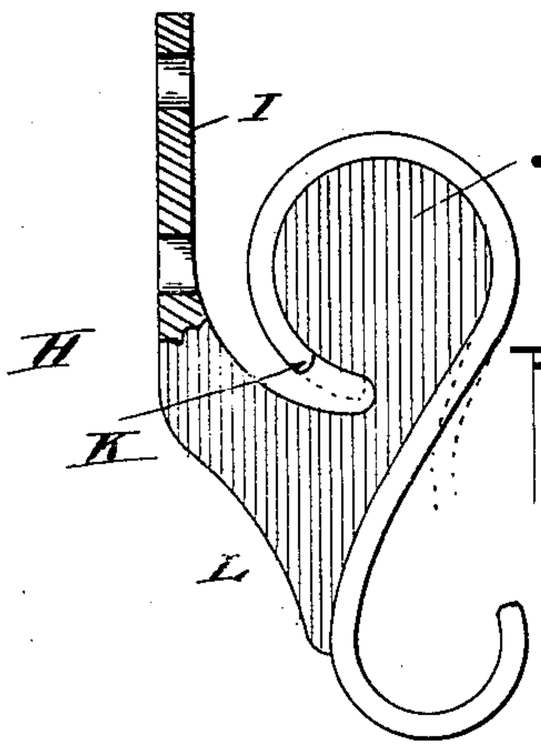

FIG. 5.

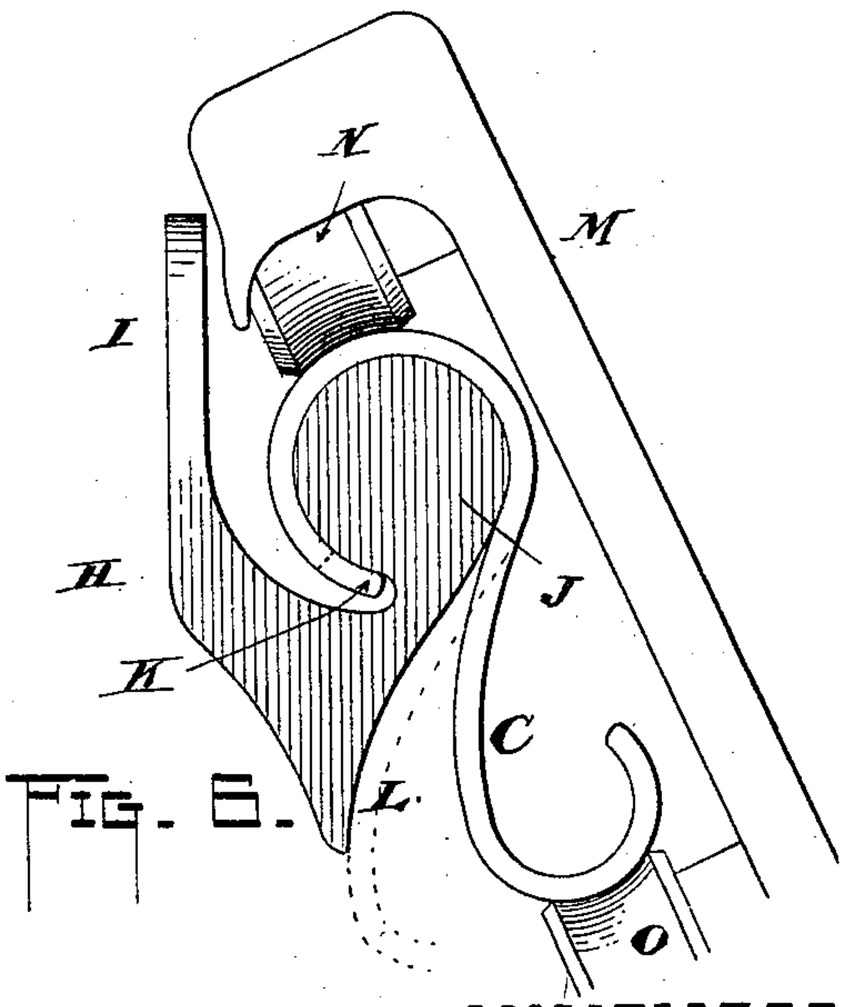

FIG. 6.

WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES E. HARRINGTON, OF CHICAGO, ILLINOIS.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 763,393, dated June 28, 1904.

Application filed October 21, 1903. Serial No. 177,915. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. HARRINGTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Hangers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to improvements in that class of devices known as "door-hangers."

One of the objects of the present invention is to produce a new form of track and means for suspending the same from the building.

Another object is to provide a simple means of suspending the door from the track, such means permitting the door to swing outward from the door-opening by a new arrangement.

Still another and important object is to produce a door-hanger costing much less than others of its class and consisting of few parts.

Lastly, an object of my present invention is to construct a peculiar form of track that will be much stronger and more rigid than any heretofore made, as far as I am aware, at least.

In the appended drawings, Figure 1 is a view of a portion of a door hung from its track secured to a building. Fig. 2 is a perspective view of a fitting for holding the end of the track. Fig. 3 is a perspective view of a hanger for supporting the track and designed to be secured to the building. Fig. 4 is a perspective view of a portion of the track as I prefer to construct it. Fig. 5 is an end view of the track, showing a hanger for the same. Fig. 6 is a similar view showing the track swung on its hanger and the door-hanger upon the track in the thrown-out position.

A indicates a door, and B the building. The track is indicated by the letter C, and consists of a ribbon of metal, preferably steel, rolled in an **S** form, substantially as shown in the drawings. This member is supported at each end by a bracket D. (Shown in Fig. 2.) This bracket consists merely of a portion E, bolted or otherwise secured to the building and having an ear F, which is provided with a boss G for entering the end of the track C. These brackets D serve both as supports for the said track and as stops for the door in its movements at its extreme limits of travel. In Fig. 3 is shown a bracket H of peculiar form. It comprises an ear I to be secured to the building, with which is formed ears J J, substantially as shown in said figure and in Figs. 5 and 6 as well. It will be observed that said ears J J are undercut in such a manner that they will pass freely into the upper limb-space of the track, and it will be observed, further, that said ears are undercut to such an extent that the extremity K of the track does not reach the farthest limit of the space beneath said ears, and in this peculiarity lies an important and valuable point in my invention, as will be brought out presently. The bracket H has a depending portion L beneath the ears J J, and this said depending portion serves as a bearing for the intermediate portion of the track when in its normal position. As shown in Fig. 1, several of the brackets H are provided for the track to properly support it. Now in addition to forming a support said brackets form a pivotal joint in connection with the track itself for permitting the latter to swing outward, an action that is very desirable in a door of the kind described. Fig. 6 shows the track in the position it assumes when the door is swung outward. The door-hanger M is provided with grooved rollers N O to engage with and travel along the track. Since the ears J J conform to the curve of the upper limb of the track and are just a little smaller in diameter than the opening of said track, it will be seen that the latter will be free to swing toward and away from the brackets H by the swinging of the door, the rollers N and O being snug against the track, so that they cannot move except along the track—that is to say, they cannot leave the track during the outward swing, (shown in Fig. 6,) and hence the track itself must rock on the brackets H and D, as will be understood. The track is cut into the desired length for the door to be hung, the brackets H are entered at the end thereof and distributed to the positions desired to properly support the said track at intervals, after which such brackets are se-

cured to the building as desired, and then the and brackets D are entered in the ends of the track and secured in place after the door-hangers M have been placed in position.

Several advantages result from this device as constructed and combined. First, the track being of an S or ogee form is much stronger than any tubular track; second, the brackets H enter the track from the bottom, so that the opening of the said track is beneath, and therefore no snow or rain can enter to freeze and prevent proper operation of the device; third, the track itself rocks around its own axis, so that no friction is set up between the rollers of the door-hanger and said track; fourth, all hinges for allowing the door to swing outward are dispensed with, thus simplifying and cheapening construction.

When several lengths of the track are to be used for a job requiring great length of such track, the ends of such brackets may be abutted at one of the brackets H, so that the ears J each support one of said track ends. In this manner a track of any length may be constructed without the aid of any fastening devices other than the end brackets D described.

I claim—

1. In a door-hanger of the character described, the door and its hangers, a track S-shaped in cross-section, brackets for attachment to the building and adapted to enter the upper tubular portion of the track from beneath, said track adapted to rock on said members in the manner described and for the purposes explained.

2. A door-hanger of the character described comprising a track closed at the top to form a tubular member at said top, brackets attached to the building and having upwardly-extending heads adapted to enter the track and support the same and permit it to rock thereon toward and away from the door-opening, and a door mounted to travel along the track for the purposes described.

3. A door-hanger of the character described comprising an S-shaped track, brackets on the building upon which the track is adapted to hang, said brackets entering the upper recess of said track from below, the track adapted to rock on the hangers, and a door hung upon the track to swing therewith and travel along the same substantially in the manner described and shown.

4. A door-hanger of the character described comprising an S-shaped track, brackets for attachment to the building above the door-opening, said brackets having heads for entering the upper recess of the track, the latter adapted to swing on the brackets away from the door-opening and a door mounted on the track to swing with it and slide along the same for the purposes described.

5. A door-hanger of the character described comprising a track S-shaped in cross-section, supporting-brackets for entering the upper recess of the track, said track overhanging said brackets and adapted to rock thereon, a door-hanger hung upon the track, grooved rollers secured thereto above and below the track, such rollers engaging the limbs thereof and preventing the door swinging except with the track as set forth.

6. In a door-hanger of the character described, the track C S-shaped in cross-section, brackets H secured to the building above the door, and having heads J for entering the upper recess of the said track, the latter adapted for rocking movement on said heads toward and away from the door-opening, the door A, the hangers M secured thereto and the rollers N and O carried by said hangers, one of said rollers being above and the other below the track and in engagement therewith, both adapted to hold the door and track relatively rigid in order that both may rock together on the supports H as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. HARRINGTON.

Witnesses:

JOHN J. FITZGERALD,

EDNA C. KAIN.