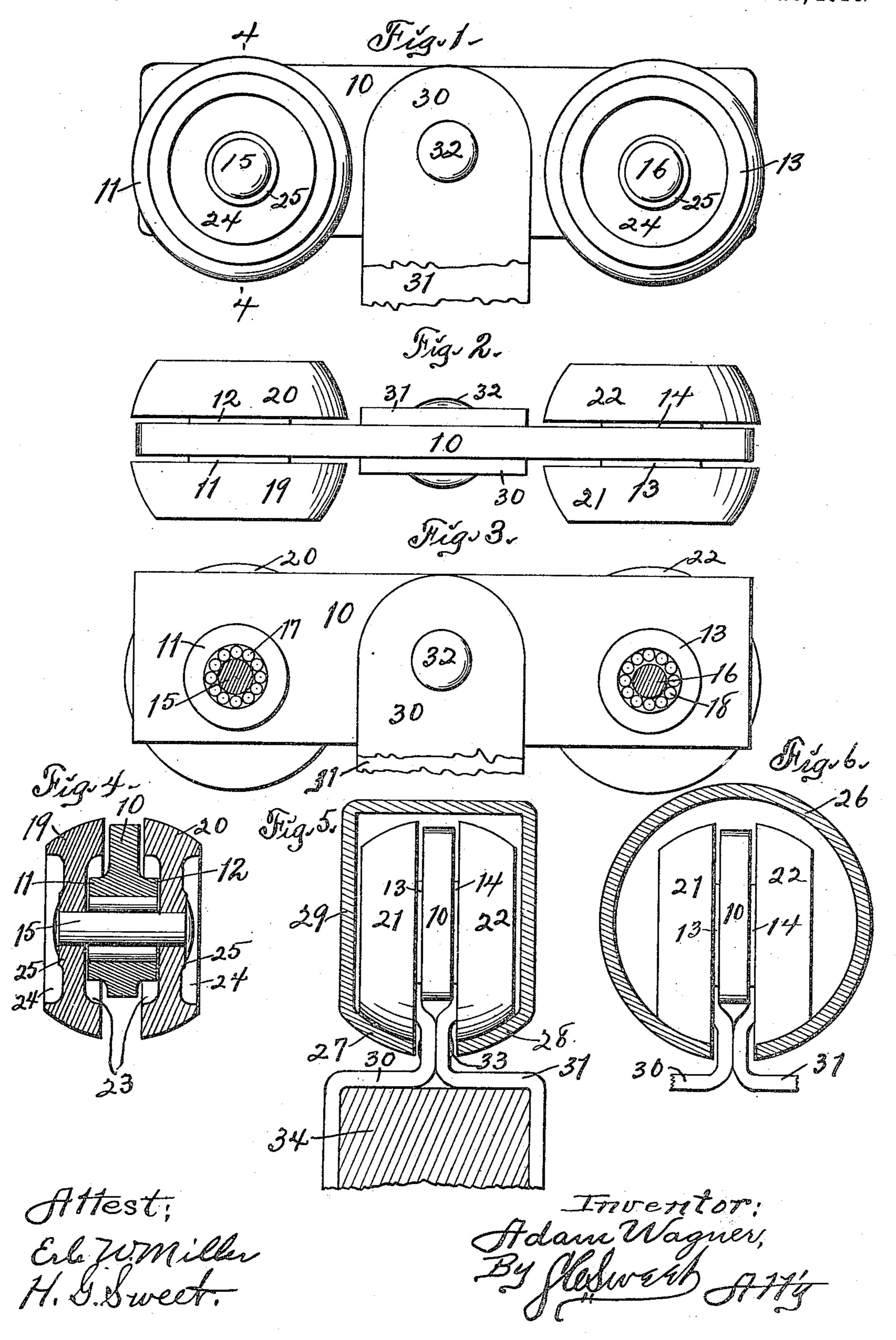
A. WAGNER. DOOR HANGER. APPLICATION FILED MAY 13, 1909.

962,538.

Patented June 28, 1910.



STATES PATENT OFFICE.

ADAM WAGNER, OF CEDAR FALLS, IOWA.

DOOR-HANGER.

962,538.

Patented June 28, 1910. Specification of Letters Patent.

Application filed May 13, 1909. Serial No. 496,291.

To all whom it may concern:

Be it known that I, Adam Wagner, a citizen of the United States of America, and resident of Cedar Falls, Blackhawk county, 5 Iowa, have invented a new and useful Door-Hanger, of which the following is a specification.

The object of this invention is to provide an improved construction for door hangers.

A further object of this invention is to provide an improved construction for the carriage of a door hanger.

My invention consists in the construction, arrangement and combination of elements 15 hereinafter set forth, pointed out in my claims and illustrated by the accompanying

drawing, in which— Figure 1 is a side elevation of one of my improved carriages, portions of the hanger 20 straps being broken away. Fig. 2 is a plan of the same. Fig. 3 is a view similar to Fig. 1, two of the track wheels being removed. Fig. 4 is a cross-section on the indicated line 4—4 of Fig. 1. Figs. 5 and 6 are views in 25 cross-section respectively of the form of track adapted for use with my hanger car-

riage therefor.

In the construction of the device as shown the numeral 10 designates a carriage bar 30 formed with bosses 11, 12, 13 and 14 arranged in pairs near the end portions of said bar and below the median line thereof. The bosses 11, 12, 13, 14 are apertured transversely through their centers, and the bar 35 is apertured in alinement therewith. Pivots 15, 16 are mounted in the apertures in the bosses and bar and bearing rollers 17, 18 are mounted in said apertures and surround said pivots. Wheels 19, 20, 21 and 22 are 40 mounted on end portions of the pivots 17, 18 and the ends of said pivots are upset or riveted on the outer faces of said wheels. Each of the wheels 19, 20, 21, 22 is formed with a recess or cavity 23 on its inner side 45 and said recess or cavity is of circular form and is adapted to receive the bosses or hubs 11, 12, 13, 14 so that the inner sides of the rim portions of the wheels are brought into close proximity to the sides of the bar 10.

Each of the wheels 19, 20, 21, 22 is formed with a cavity or recess 24 in its outer face and a flattened face 25 centrally of said cavity and surrounding the bore of the wheel. Each cavity 24 is circular in form 55 and is adapted to contain the riveted or upset head of a pivot 15 or 16 and said head is

formed against the face 25. The recesses or cavities 24 in the wheels also effect a saving of metal and lessening of weight of the wheel as well as providing spaces for the 60 heads of the pivots and permitting the hanger or carriage to run in a smaller space than would be possible if the ends of the pivots projected beyond the outer sides of the wheel. The rollers or wheels are made 65 in the form of flattened spherical segments, that is to say, they are circular in one direction and arc shaped transversely. All of the wheels are of the same size and are formed on the same arc. The transverse shape of ⁷⁰ the rims of the wheels adapts them for travel on the inner surface of circular tracks, such as 26 in Fig. 6 or on the inner surfaces of arc shaped flanges 27, 28 of angular tracks, such as 29 in Fig. 5. Thus my im- 75 proved hanger is adapted for use with different forms of track. It also can be used to advantage on tracks having flat flanges at the bottom and ordinarily employing flat or grooved wheels. Any desired means may be 80 employed for hanging a door or other article to be supported by the bar 10 and I have shown hanger straps 30, 31 pivotally connected at their upper ends to and on opposite sides of the center of the bar by a rivet 85 32. The hanger straps 30, 31 are offset toward each other and connected by a rivet 33 beneath the bar 10 and then are offset from each other and caused to embrace a door 34, to which they may be attached in any de- 90 sired manner. The arrangement of bosses in pairs on the bar 10 as shown provides for a relatively long bearing surface for the rollers 17.

I claim as my invention—

1. A door hanger, comprising a bar formed with bosses on its opposite ends and apertured through said bosses, pivots mounted in the apertures of the bar and bosses, wheels mounted on ends of said pivots, said wheels 100 formed with recesses in their inner sides to receive said bosses, and means for suspending an object from the central portion of

2. A door hanger, comprising a bar formed 105 said bar. with bosses near its ends and below the median line thereof and apertured through said bosses, pivots mounted in the apertures of the bar and bosses wheels mounted on end portions of said pivots, said wheels formed 110 with recesses in their inner sides to receive said bosses and also formed with recesses in

their outer sides to receive heads of said pivots and means for suspending an object from said bar.

3. A door hanger, comprising a bar formed with bosses near its opposite ends and apertured through said bosses, pivots mounted through said bar and bosses, bearing rollers surrounding said pivots and extending through said bar and bosses, wheels mounted 10 on ends of said pivots, each of said wheels formed with a cavity in its inner face to re-

ceive a boss and also formed with a cavity in its outer face, ends of the pivots upset into the cavities in the outer faces of the wheels and means for suspending an object from 15 said bar.

Signed by me at Cedar Falls, Iowa, this 9" day of April, 1909.

ADAM WAGNER.

Witnesses:

W. L. March, W. R. Irwin.