

No. 713,315.

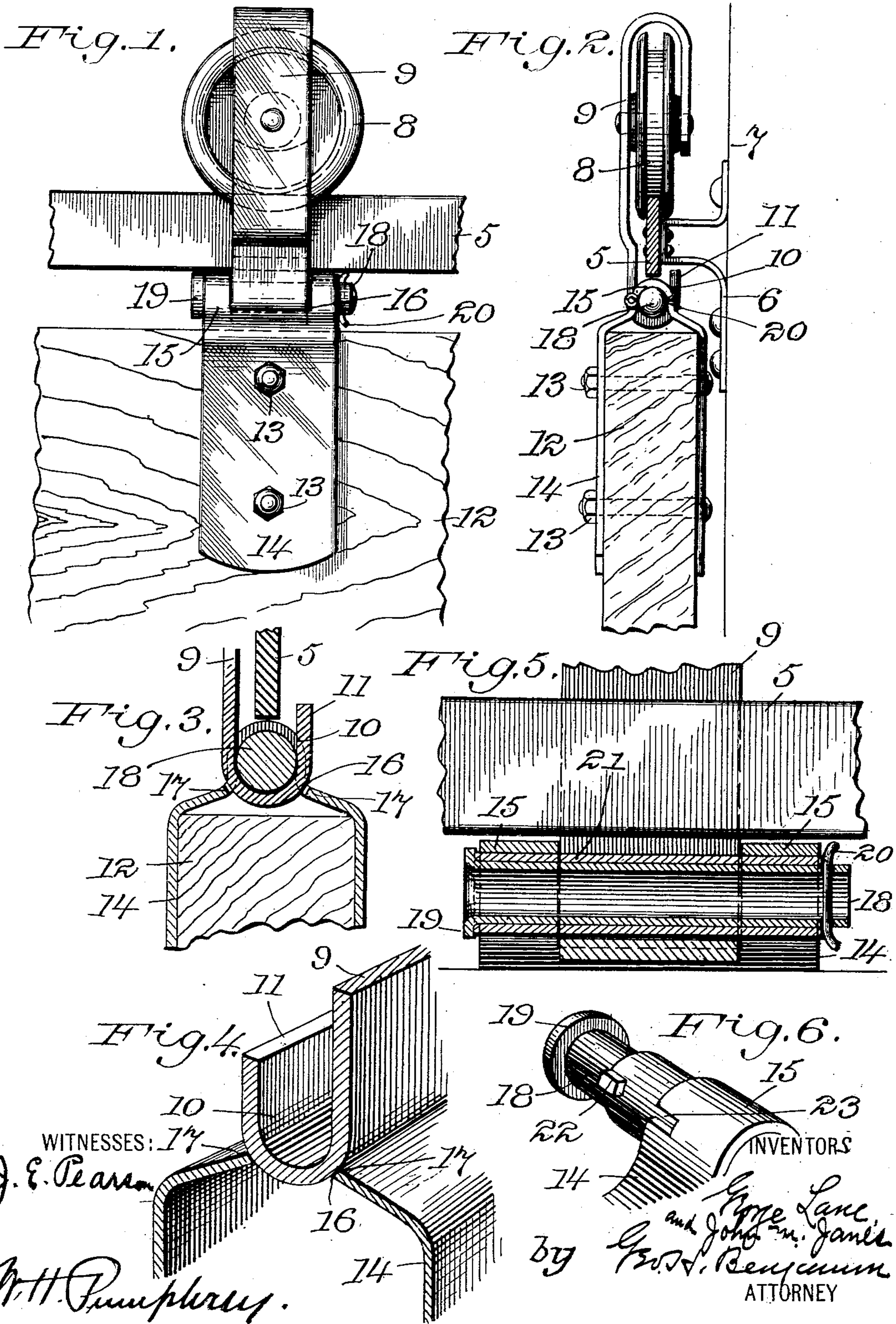
Patented Nov. 11, 1902.

G. LANE & J. M. JANES.

DOOR HANGER.

(Application filed July 8, 1902.)

(No Model.)



UNITED STATES PATENT OFFICE.

GEORGE LANE AND JOHN MICHAEL JANES, OF POUGHKEEPSIE, NEW YORK.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 713,315, dated November 11, 1902.

Application filed July 8, 1902. Serial No. 114,847. (No model.)

To all whom it may concern:

Be it known that we, GEORGE LANE and JOHN MICHAEL JANES, citizens of the United States, residing at Poughkeepsie, county of Dutchess, State of New York, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification.

Our invention relates to door-hangers of the type known as "hinged" hangers.

Our invention consists in various details of construction, which will be set forth in detail in this specification.

The objects of our invention are the construction of a door-hanger in which the respective parts forming the hinge-joint of the hanger shall be so related to each other that there will be no lost motion between such parts, thereby preventing any vertical movement and rattling between the door portion and the rolling portion of the hanger, thus insuring a free lateral movement of the door; further, that the construction shall be such that the portion of the hanger which supports the door may be readily removed from the rolling portion of the hanger, and, finally, that the hinge-joint between the two portions of the hanger shall be protected from wear through the instrumentality of an independent bearing.

The accompanying drawings will serve to illustrate our invention, and in which similar numerals indicate corresponding parts.

Figure 1 is a side view of our improved hanger mounted on the usual trackway and supporting a door. Fig. 2 is an end view. Fig. 3 is an enlarged vertical section through the lower portion of the hanger, the trackway, and the door at the hinge-joint. Fig. 4 is an enlarged perspective of the hanger at the joint, illustrating the relation between the upper and lower portions of the hanger. Fig. 5 is a longitudinal section through the hinge-joint, with the trackway in elevation, the view being taken from the right of Fig. 2. This view shows a modification of the joint. Fig. 6 is a view in perspective, showing the method of securing the wearing-sleeve to the lower strap.

In the drawings, 5 indicates a trackway secured in any suitable manner, as by brackets 6, to the side of a building 7. Mounted upon

the trackway is a wheel 8, pivoted, as is usual, in a bent strap 9. This strap is bent at the bottom to form a semicircular portion 10 and upward to form a flange 11, the upper edge of which is carried above the lower edge of the trackway 5, the object of this flange being to prevent the rolling portion of the hanger from leaving the trackway.

12 indicates a door or other body to be supported by the hanger. Secured to the upper portion of the door, at opposite sides, through suitable bolts 13 is a strap 14, the upper end of which is turned upward to form a semicircular portion 15. The semicircular portion 15 of the strap 14 is cut away longitudinally to form an opening 16 to receive the semicircular portion 10 of the strap 9. It will be observed, however, by reference to Fig. 3 that the transverse diameter of this opening is less than the transverse diameter of the semicircular portion 10 of the strap 9. In other words, the strap 14 is provided with shoulders 17, which when the parts are united form a bearing at the cut-out portion 16 for the semicircular portion 10 of the strap 9.

18 indicates a hinge-pin for securing the parts together, which may be constructed as shown in Figs. 1, 2, and 3 or Figs. 5 and 6. In Fig. 3 the pin is a solid pin having a head 19 at one end and perforated at the other end to receive a cotter 20. As shown in Fig. 5, the pin is a tubular pin, over which is placed a sleeve 21. In order to prevent the sleeve 21 from turning, it is provided with one or more projecting ears 22, which take in slots 23, formed in the outer surface of the semicircular portion 15 of the strap 14.

It will be observed, by reason of the construction described, that when the straps 9 and 14 are brought together the semicircular portions of these straps 10 15 together form a circle and that by reason of the bearing-shoulder 17 there will be practically no vertical movement between the straps 9 and 14. It will also be understood that by taking out the hinge-pin 18 the door 12 can be removed from the rolling portion of the hanger, and, further, that by reason of the employment of the sleeve 21 the wearing due to the swinging of the door will be distributed between the hinge-pin and the inner surface of the sleeve 21.

Having thus described our invention, we claim—

1. In a door-hanger, the combination of a strap bent upward at one end to form a flange and carrying a wheel at its upper end, a second strap adapted to carry a door, bent upon itself and cut away on the top of its bent portion to receive the bent end of the first-named strap, whereby a close joint is formed between the two straps which will permit of no vertical movement of the door and its support, and a hinge-pin uniting the straps.
2. In a door-hanger, the combination of a strap carrying a wheel and bent at its lower end to form a semicircular portion with an upward-projecting flange, a second strap for carrying a door bent at its upper end to form a semicircular portion cut away to receive the semicircular portion of the first-named strap, the transverse diameter of the cut-away portion of said second-named strap being less

than the transverse diameter of the semicircular portion of the first-named strap, and a hinge-pin uniting the parts.

3. In a door-hanger, the combination of a strap carrying a wheel and bent at its lower end to form a semicircular portion, a second strap for carrying the door bent at its upper end to form a semicircular portion of the same transverse diameter as the semicircular portion of the first-named strap and such semicircular portion cut away at its center to receive the semicircular portion of the first-named strap, and a hinge-pin.

In testimony whereof we affix our signatures in the presence of two witnesses.

GEORGE LANE.

JOHN MICHAEL JANES.

Witnesses:

C. J. BROWER,

O. F. MAMBERT.