

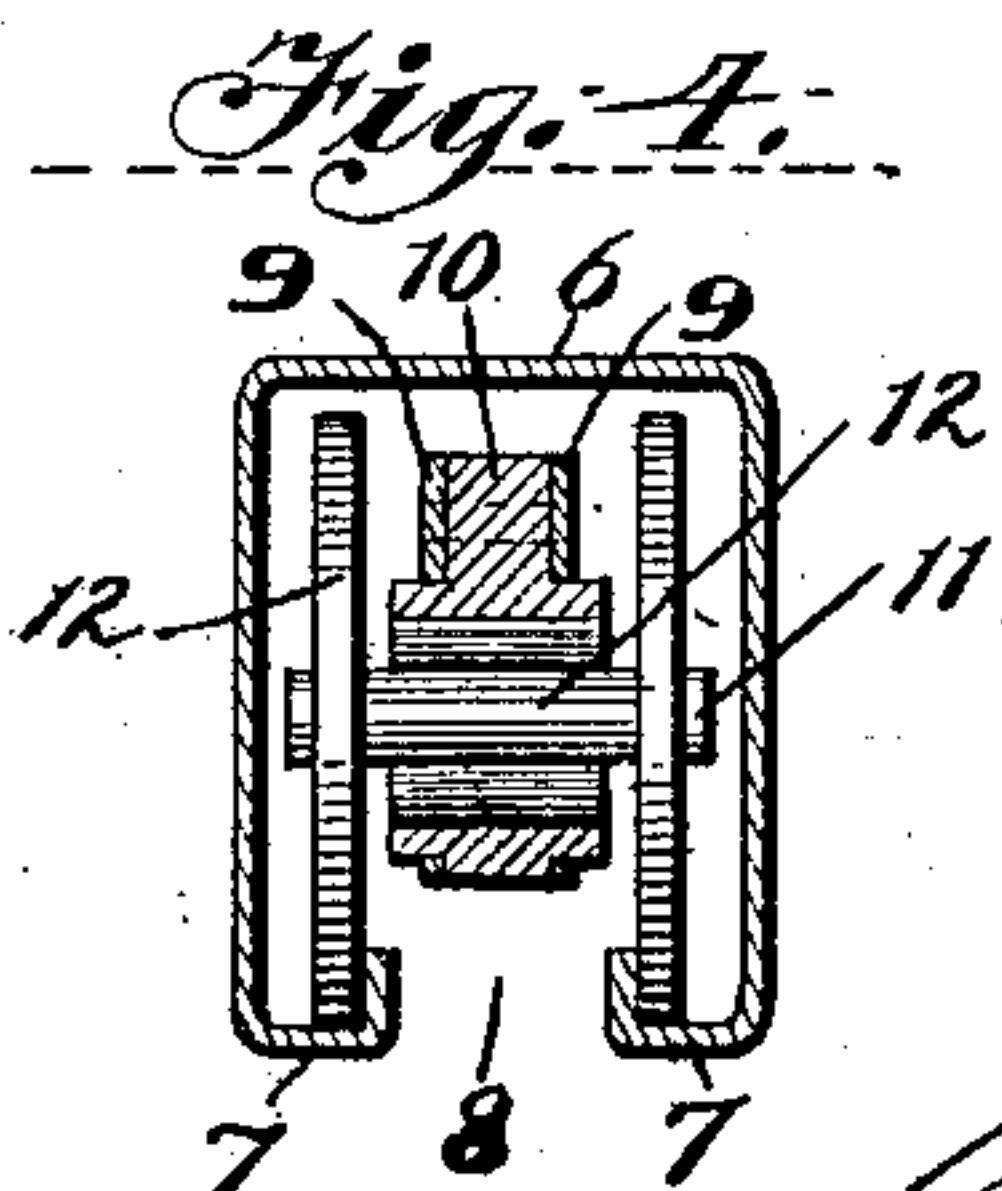
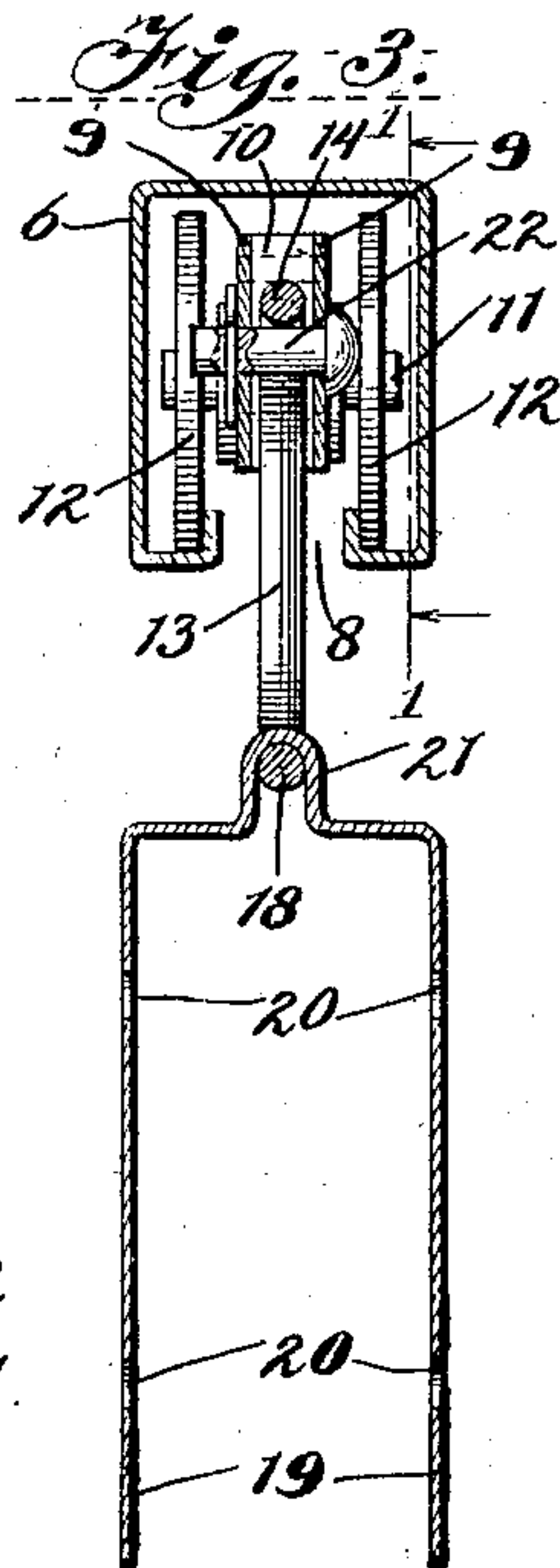
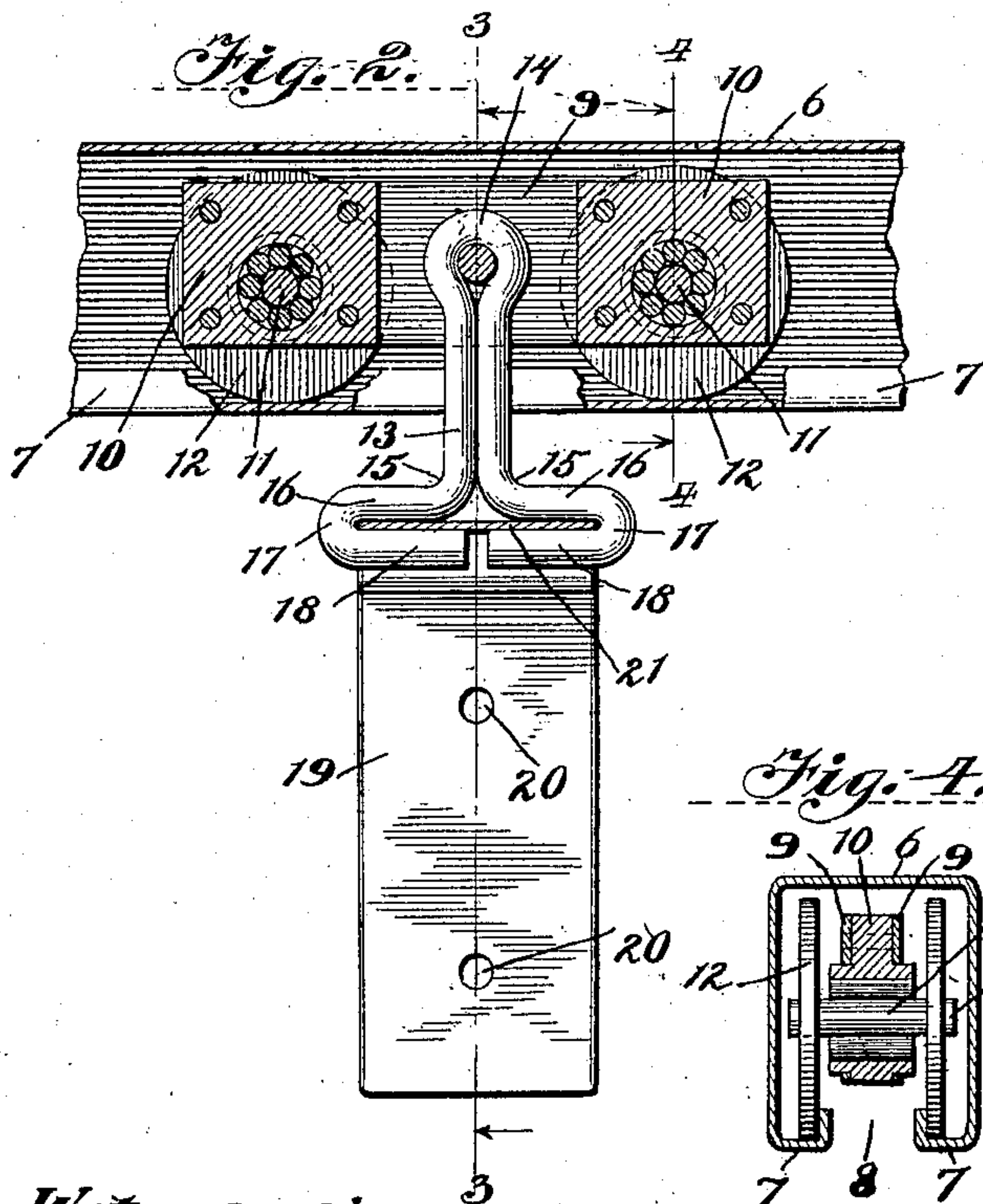
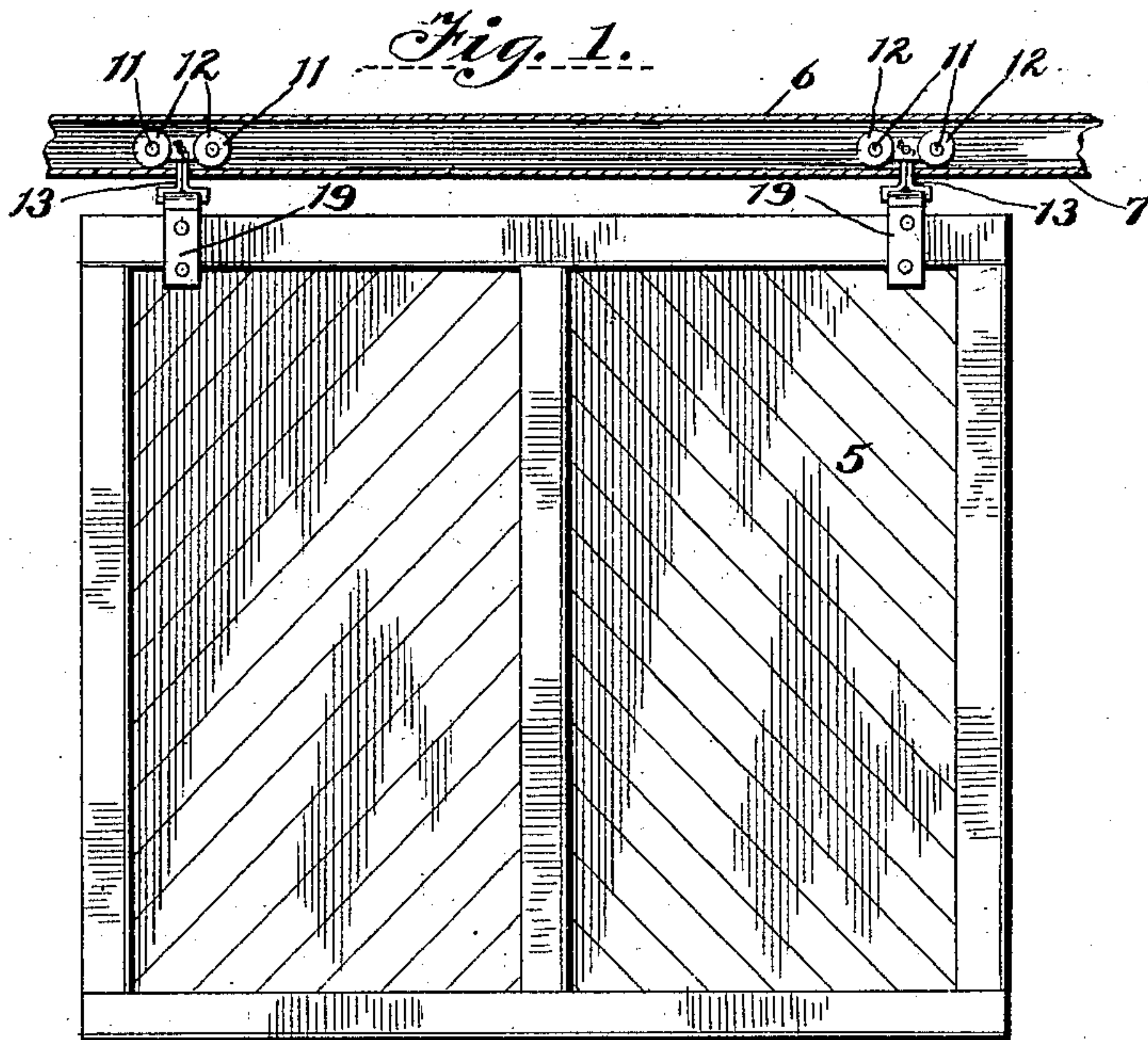
No. 694,044.

Patented Feb. 25, 1902.

G. WIDEMAN.  
DOOR HANGER.

(Application filed Sept. 9, 1901.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 694,044, dated February 25, 1902.

Application filed September 9, 1901. Serial No. 74,819. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAVUS WIDEMAN, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to door-hangers, and particularly to such hangers as are primarily intended for use in connection with barn-doors and the like, where as great accuracy in fit is not apt to be as essential as in the case of inner or house doors and where such doors are ordinarily subjected to rougher usage than house-doors. It is desirable in many cases with barn and similar doors to make provision for swinging the door outward without disturbing the rolling connection of the trolley and its track, and it is desirable also that provision be made for a connection between the door and its trolley that is slightly flexible, as such a flexible connection is of advantage at times in moving the door backward or forward when temporarily stuck.

By my invention I provide a cheap, simple, and effective door-hanger possessing both of these desirable features, and I accomplish this by the devices and combination of devices shown in the drawings and hereinafter described.

That which I regard as new will be set forth in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved hanger applied to a door, the track for the trolley-wheels of the hanger being shown in longitudinal section. Fig. 2 is a longitudinal vertical section, the hanger-bar being shown in elevation. Fig. 3 is a cross-section at line 3 3 of Fig. 2, and Fig. 4 is a cross-section at line 4 4 of Fig. 2.

Referring to said figures of the drawings, 5 indicates a door of any ordinary construction.

6 indicates a trolley-track of the well-known tubular construction made of a single piece of heavy sheet metal, having its two sides turned inwardly and upwardly to form the

parallel tracks 7 7 for door-hanger trolley-wheels to run upon.

8 indicates the central longitudinal opening between the tracks 7 7 for a door-hanger arm to depend through.

9 indicates the side pieces of a trolley-frame, and 10 a block at each end of the side pieces 9, said blocks being secured to and between the side pieces 9, such construction leaving, as best shown in Fig. 2, a space between the two end blocks 10.

11 indicates axles passing through the blocks 10 and side pieces 9 and having fixedly secured to their ends trolley-wheels 12, the axles being surrounded, as shown, by roller-bearings.

13 indicates the door-suspending arm, which, as shown, is formed from a single piece of heavy material, round in cross-section, bent at its central portion to form an eye 14, the two halves below such eye lying parallel with each other and each half being bent, as at 15, in opposite directions to produce two substantially horizontal portions 16, which are each given a bend 17, that brings the end portions 18 around substantially parallel with the portions 16, the ends of the bar approaching very close to each other, as shown. A long narrow opening is left between the substantially horizontal and parallel portions 16 and 18.

19 indicates a strap adapted to be secured to the faces of the door 5 by suitable screws passed through holes 20. At its central portion, which in use is its upper end, it is bent so as to form a bearing 21, that just fits over the end portions 18 of the hanger-arm, on which it is adapted to turn when the door is swung outward at right angles to its movement on its trolley. The upper part of this bearing is curved or rounded, as shown, to conform to the round rod that the arm 13 is made from, so as to turn easily on the portions 18 of such rod, and the opening between the parallel portions 16 and 18 of the arm 13 is just sufficient to enable the bearing 21 to turn freely on its support, but preventing any vertical play of the bearing, which is important in preventing jars or shocks when moving the door.



22 indicates a pivot-bolt located about mid-way of the trolley-frame and passing through the side plates 9 9 of such frame and the eye 14 at the upper end of the hanger-arm 13, the said arm being between said side plates, as shown. The space between the end blocks 10 is sufficient to allow the hanger-arm considerable play backward and forward on its pivot 22, which under some conditions is quite an advantage over an arm rigidly depending from the frame when manipulating a door that has become temporarily stuck.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. In a door-hanger, the combination with a wheel-frame, of a hanger-arm formed of a single piece of material bent to have an eye 14 at its central or upper portion, vertical portions below said eye, oppositely-extending horizontal portions 16, said last-named portions being bent back on themselves to form

horizontal portions 18 with an opening between said portions 16 and 18, a door-attaching strap adapted to be held between said portions 16 and 18, and a pivot on said wheel-frame from which said hanger-arm is suspended by its eye 14, substantially as specified.

2. In a door-hanger, the combination with a wheel-frame, of a hanger-arm pivotally suspended therefrom and having an enlarged lower portion that is extended in opposite directions beyond the pivotal support of the said arm, and provided with a narrow opening in said enlarged portion, said opening being adapted to receive a door-attaching strap, substantially as described.

GUSTAVUS WIDEMAN.

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