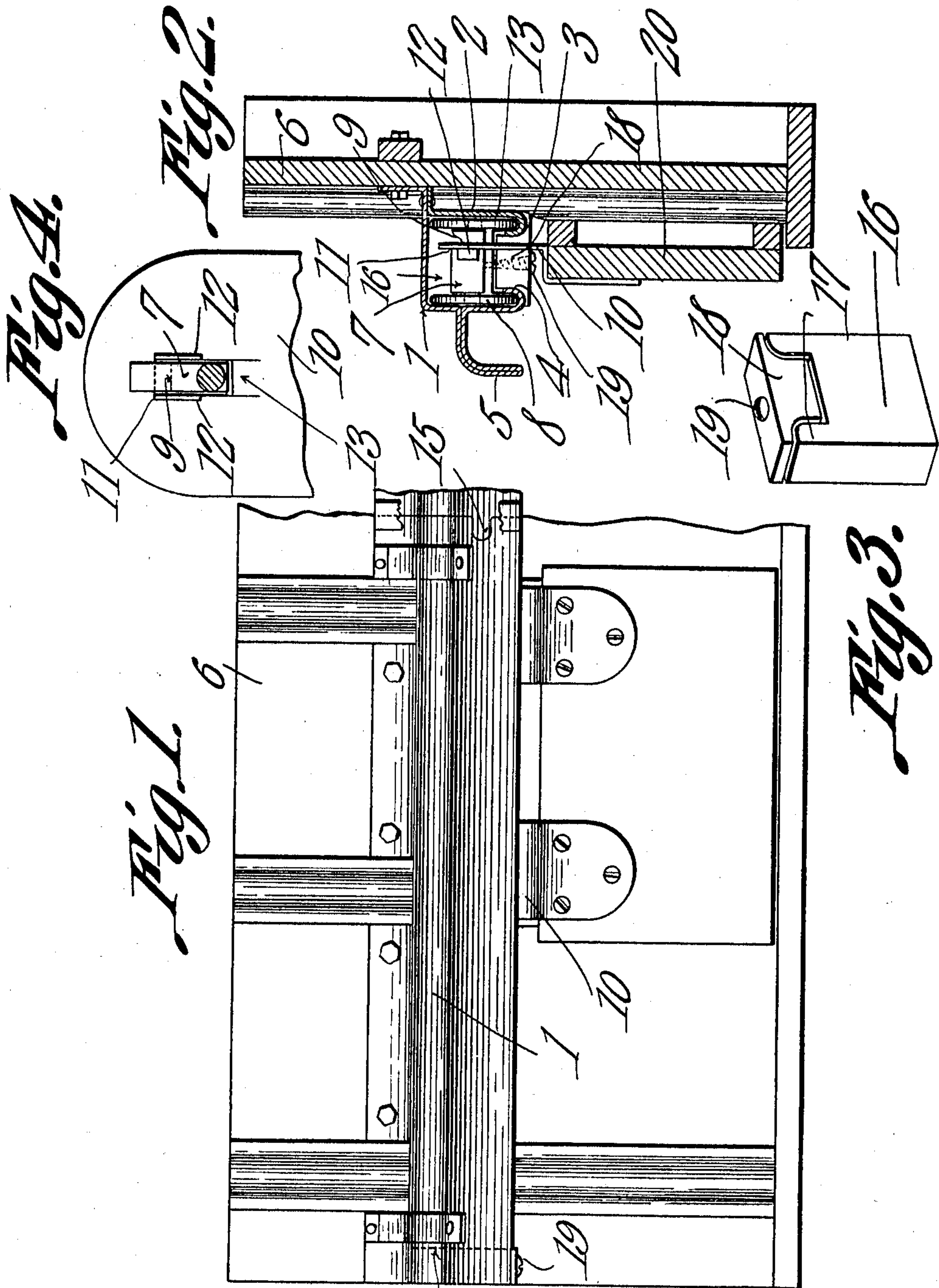


J. M. WHIPPS.
BARN DOOR HANGER.
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970,408.

Patented Sept. 13, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSHUA M. WHIPPS, OF LESUEUR CENTER, MINNESOTA.

BARN-DOOR HANGER.

970,408.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed March 23, 1910. Serial No. 551,086.

To all whom it may concern:

Be it known that I, JOSHUA M. WHIPPS, a citizen of the United States, residing at Lesueur Center, in the county of Lesueur and State of Minnesota, have invented a new and useful Barn-Door Hanger, of which the following is a specification.

This invention relates to a barn door hanger and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a hanger especially adapted to be used for supporting a door of the edgewise movable type in such manner that the door may be swung away from the building or the door opening therein so that a passage way may be afforded for small animals and at the same time a barrier maintained for larger ones.

With this object in view the structure includes a simple and an effective assemblage of parts so combined as to effectually protect the structure against the weather, etc.

In the accompanying drawings:—Figure 1 is a side elevation of a door supported by the hanger; Fig. 2 is a transverse sectional view of the same; Fig. 3 is a detailed perspective view of a bumper block used in the hanger structure; Fig. 4 is a detailed sectional view through an axle which supports one of the hanger plates of the structure.

The structure embraces a track, a carriage or carriages arranged to travel thereon and hanger plates mounted upon the carriage or carriages and adapted to support the door structure. The track is attached to the side of a barn structure in the usual manner and the said track includes an outer plate 1 and an inner plate 2. The plate 2 is provided at its lower edge with an upturned flange 3 which constitutes a tread for the inner wheels of the carriage to be described later. The plate 1 is provided at its lower edge with a similar upturned flange 4 which also serves as a wheel tread. The plate 1 is provided at its outer side with an outwardly and downwardly curved section which is returned upon itself and forms an eave 5. The said plates 1 and 2 may be connected directly together as illustrated in Fig. 2 of the drawing or the upper edge portions of both of the said plates may be attached directly to the side of the barn structure 6. The flanges 3 and 4 of the plates 2 and 1 respectively are spaced from each other in

the manner as illustrated in Fig. 2 of the drawing.

For supporting the door (to be described) one or more carriages may be provided and the said carriage or carriages are adapted to travel upon the flanges 3 and 4 of the plates 2 and 1. Each carriage consists of an axle 7 having wheels 8 journaled at its end. Each axle is provided in its upper edge with a notch 9. Hanger plates 10 are provided with openings 11 which receive the intermediate portions of the axles 7 and the material removed from the body of the hanger plate to form the openings 11 is bent back forming flanges 12 which lie against the opposite sides of the axle 7 to which the said plate is attached. Each hanger plate 10 is provided immediately below its opening 11 with a tongue 13 and when the said plate is positioned upon the axle 7 the said tongue is bent laterally so it will afford room to enable the axle to be slipped within the opening 11. After the plate 10 is in proper position upon the axle and the upper edge of the opening 11 is inserted in the notch 9 the tongue 13 is bent back into its original position with relation to the body of the plate and the upper edge of the said tongue serves as means for preventing the upper edge of the opening 11 from disengaging the notch 9 provided in the axle 7.

It is of course to be understood that the track way of which the plates 1 and 2 form component parts may be made in sections and the said sections may be joined together at their ends in any appropriate manner. Fig. 1 of the drawings indicates one method in which the sections may be joined and in the said figure one track section is provided with tongues 15 which fit snugly in corresponding grooves provided in the end of the adjacent track section. Also the ends of the terminal track sections may be closed by blocks such as that illustrated in Fig. 3 of the drawings. The said block constitutes a bumper and consists of a body block 16 which is adapted to fit between the inner surfaces of the plates 1 and 2 and which is provided with projections 17 adapted to extend down into the space between the sides of the plates and their respective flanges. A block 18 is detachably applied to the lower end of the block 16 and is held in position by means of a screw 19 or other securing device. The upper edge of the block 18 at its end portion is adapted to fit snugly against the under side

of the plate 1 and the lower portion fits against the inner surfaces of the flanges 3 and 4 of the plates 2 and 1. A door 20 is attached at its upper edge portion to the lower ends of the hanger plate 10 and is arranged to move over a door opening provided in the barn structure 6 in the usual manner.

By reference to Fig. 2 of the drawing it will be seen that the lower edge of the eave 5 is approximately at the same level as the lower ends of the plates 1 and 2 and consequently the said eave will serve as an effectual fender to keep the elements from blowing or driving in between the plates 1 and 2 and damaging the parts located at this point.

The notches 9 are wider at their upper ends than they are at their lower ends and consequently it is possible to swing the door 20 away from the barn structure 6 while at the same time the said door may be moved longitudinally along the barn structure. Therefore the door 20 may be so positioned over the door opening that a passage way may be afforded for small animals and a barrier is provided for larger ones.

Having described the invention what I claim as new and desire to secure by Letters-Patent is:

1. In a door hanger, the combination with a track comprising in its structure spaced

plates having upturned flanges forming wheel treads, of a carriage consisting of an axle, wheels journaled at the ends of the axle and arranged to travel upon the said treads, said axle having a notch in its upper edge, said notch being larger at its upper end than at its lower end, and a hanger plate adapted to be connected to a door and having an opening in its upper end adapted to engage the said notch.

2. In a door hanger, the combination with a track comprising in its structure spaced plates having upturned flanges forming wheel treads, of a carriage consisting of an axle, wheels journaled at the ends of the axle and arranged to travel upon said treads, said axle having at its upper end a notch, and a hanger plate adapted to be secured to a door and having an opening which fits snugly against the axle and having its upper end adapted to engage said notch, said plate having at the side edges of its opening flanges which are located adjacent to the opposite sides of the axle.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOSHUA M. WHIPPS.

Witnesses:

E. A. SCHREPEL,
W. H. JAEGER.