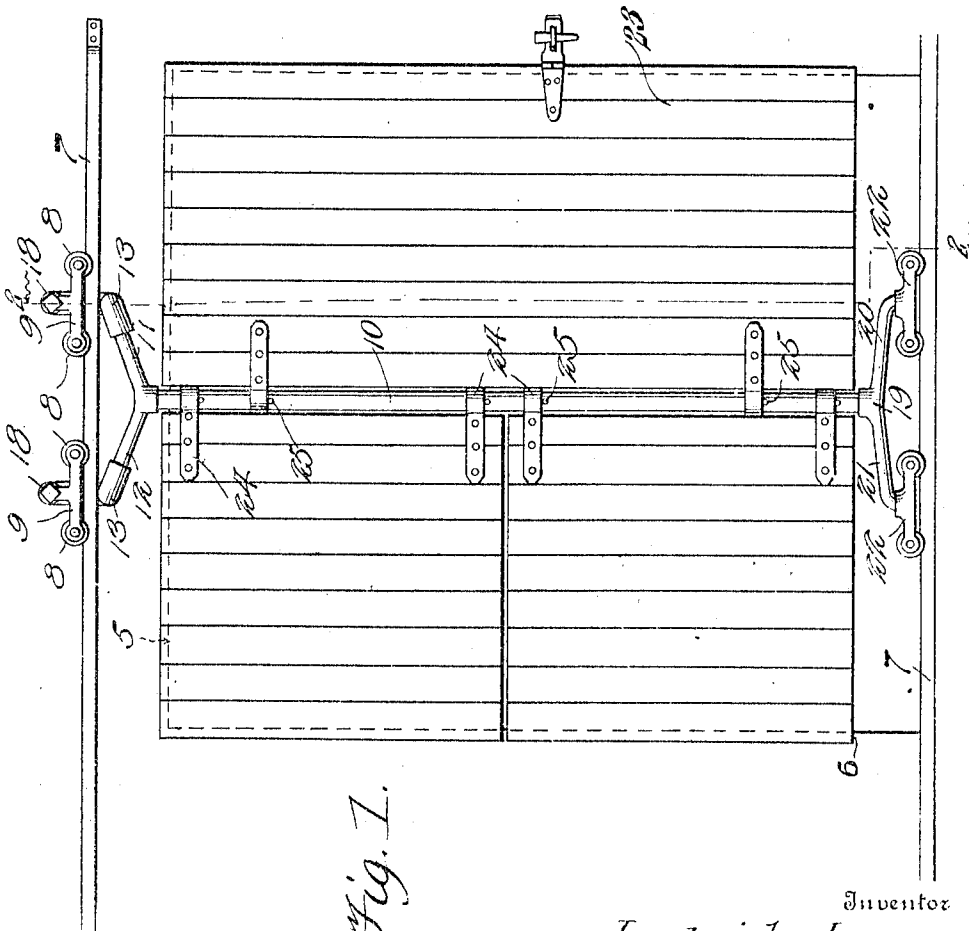
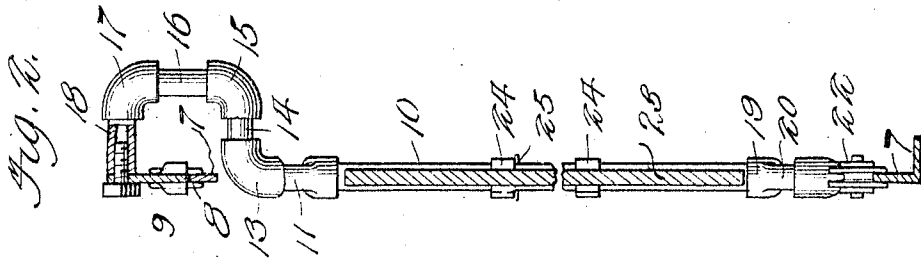


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DOOR.

APPLICATION FILED JAN. 25, 1911.

1,019,664.

Patented Mar. 5, 1912.



Witnesses

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# UNITED STATES PATENT OFFICE.

LUDWICK LARSON, OF BRADY ISLAND, NEBRASKA.

## DOOR.

1,019,664.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed January 25, 1911. Serial No. 804,845.

### *To all whom it may concern:*

Be it known that I, LUDWICK LARSON, a citizen of the United States, residing at Brady Island, in the county of Lincoln and State of Nebraska, have invented new and useful Improvements in Doors, of which the following is a specification.

This invention relates to improvements in doors and hangers for the same and has for its object the provision of an improved form of hanger to slide upon a suitable track and adapted to support a plurality of doors arranged to swing in opposite directions so that in the event of a person desiring to gain access to the building or other structure to which the door is applied, it will only be necessary to move one of the swinging doors to open position in the ordinary manner, whereby the usual necessity of sliding the structure will be eliminated.

With the above and other objects in view, which will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claim; it being understood that various changes in the form, proportion, size, and minor details of the device may be made, within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming part of the specification;—Figure 1 is a front elevation of the device showing it applied to an ordinary door-frame provided with the usual tracks. Fig. 2 is a sectional end view on the line 2—2 of Fig. 1 and looking in the direction of the arrow.

Similar numerals of reference are employed to designate corresponding parts throughout.

The upper and lower sides of the door frame are designated, respectively, by the numerals 5 and 6, and are rabbeted in the usual manner and provided with the tracks 7. Arranged to travel on the upper sides of the tracks 7 are grooved wheels 8, the said wheels being arranged in pairs and connected by parts 9. The hanger embodying the subject matter of the present invention comprises a vertical body portion 10, preferably formed of metallic tubing and of any desired length, according to the dis-

tance between the upper and lower ends of the door opening. The upper end portion of the hanger is provided with a Y-coupling which supports the laterally extending arms 11 and 12, the said arms being preferably formed of lengths of metallic tubing. The arms 11 and 12 are terminally provided with elbows 13, the said elbows being directed inwardly or toward the inner sides of the channels in the sides of the door-frame and screwed into the elbows are tubular extensions 14, the inner ends of which are provided with upwardly curved elbows 15. Extending from the elbows 15 are upward extensions 16, the upper ends of which are provided with outwardly extending elbows 17, said elbows 17 receiving one end of tubular extensions 18, the opposite ends of which are secured in any preferred manner to the parts 9. The lower end portion of the body 10 is provided with a Y-coupling 19 similar to the coupling at the opposite end of the body, and secured to the coupling 19 are arms 20 and 21. The said arms 20 and 21 are connected in a manner similar to the arms 11 and 12 to the parts 22 carrying the wheels which bear on the lower track 7. With this construction it will be manifest when the parts are in position as shown in Fig. 1 and in the manner just described the hanger may be moved toward either end of the tracks.

The doors which are of ordinary construction are designated in general by the numeral 23. It will be seen now by reference to Fig. 1 that the combined widths of these doors correspond substantially to the width of the door opening in the structure to which the device is applied. The doors are connected with the body 10 by means of straps 24, the said straps 24 being secured for the greater portion of their length to one face of the doors and terminating at one end in enlarged eyes to loosely receive the body 10 of the hanger. The doors are supported on the body 10 by means of pins 25 which are passed through transverse openings formed in the body 10 and form bearing surfaces for the lower ends of the eyes of the straps. With this construction it will be manifest that the doors may be swung in opposite directions so as to bear on opposite sides of the body 10, whereupon they will completely seal the door opening so that when it is necessary to gain access to the building without sliding the structure on the tracks 7,

either door may be swung open in the usual manner.

From the foregoing, it is evident that I have provided a device which is comparatively simple in structure and inexpensive to manufacture, embodying few parts and these so arranged that the danger of derangement will be reduced to a minimum.

I claim:—

- 10 A combined sliding and swinging door comprising a vertical hanger bifurcated at its upper end to provide offset portions, supporting rollers carried by the offset portions, the lower end of the hanger being bifur-

cated and provided with supporting rollers, 15 a swinging door of a length, equaling the length of the hanger pivoted to the hanger on one side, and a plurality of doors arranged oppositely upon the door just mentioned and being pivoted to the hanger, said 20 doors being arranged one above the other and for independent swinging movement.

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

LUDWICK LARSON.

Witnesses:

H. L. AINLAY,

E. D. HAWLEY.