March 11, 1924. 1,486,742

P. W. HAGAN

GARAGE DOOR

Filed June 14. 1922 2 Sheets-Sheet 1

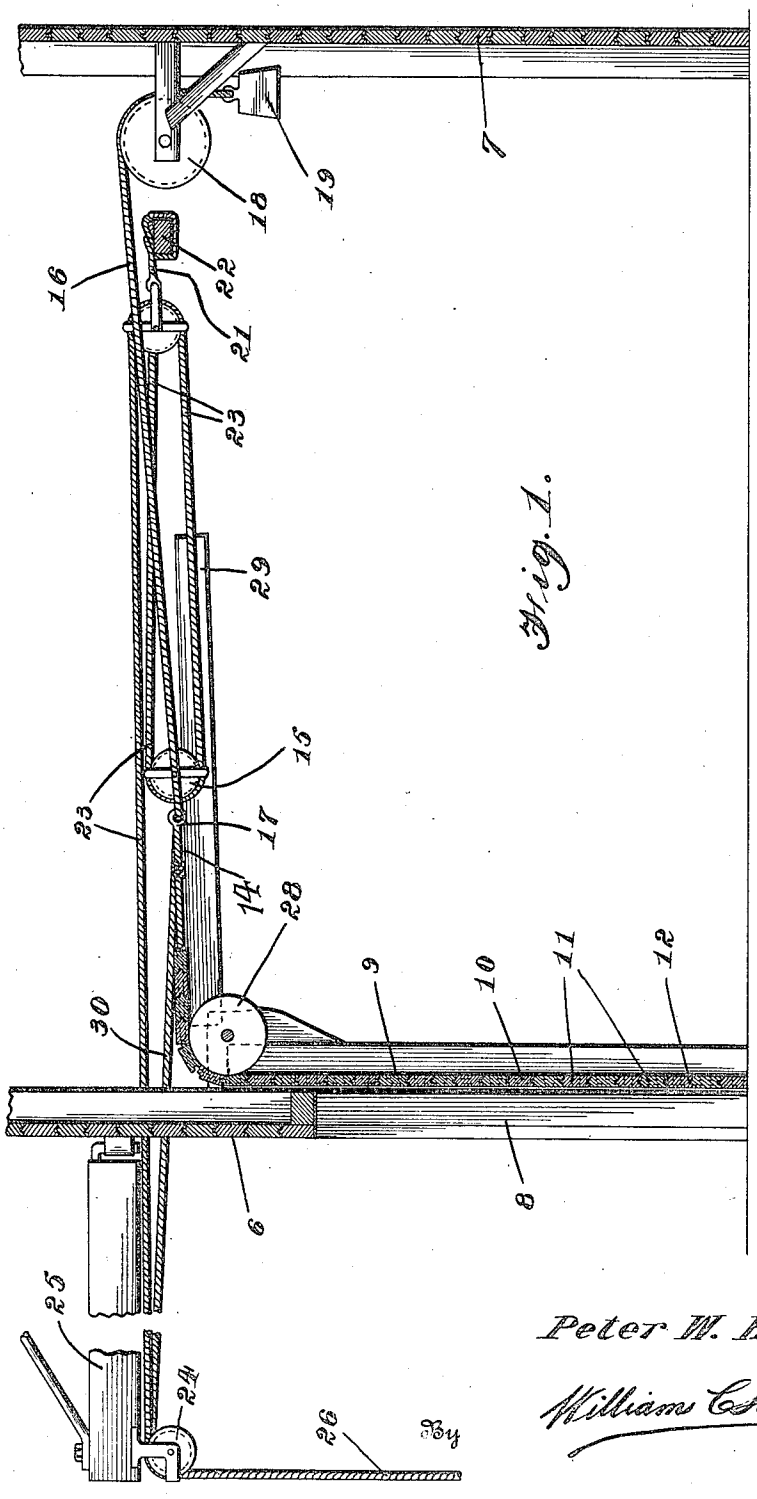


Fig. 1.

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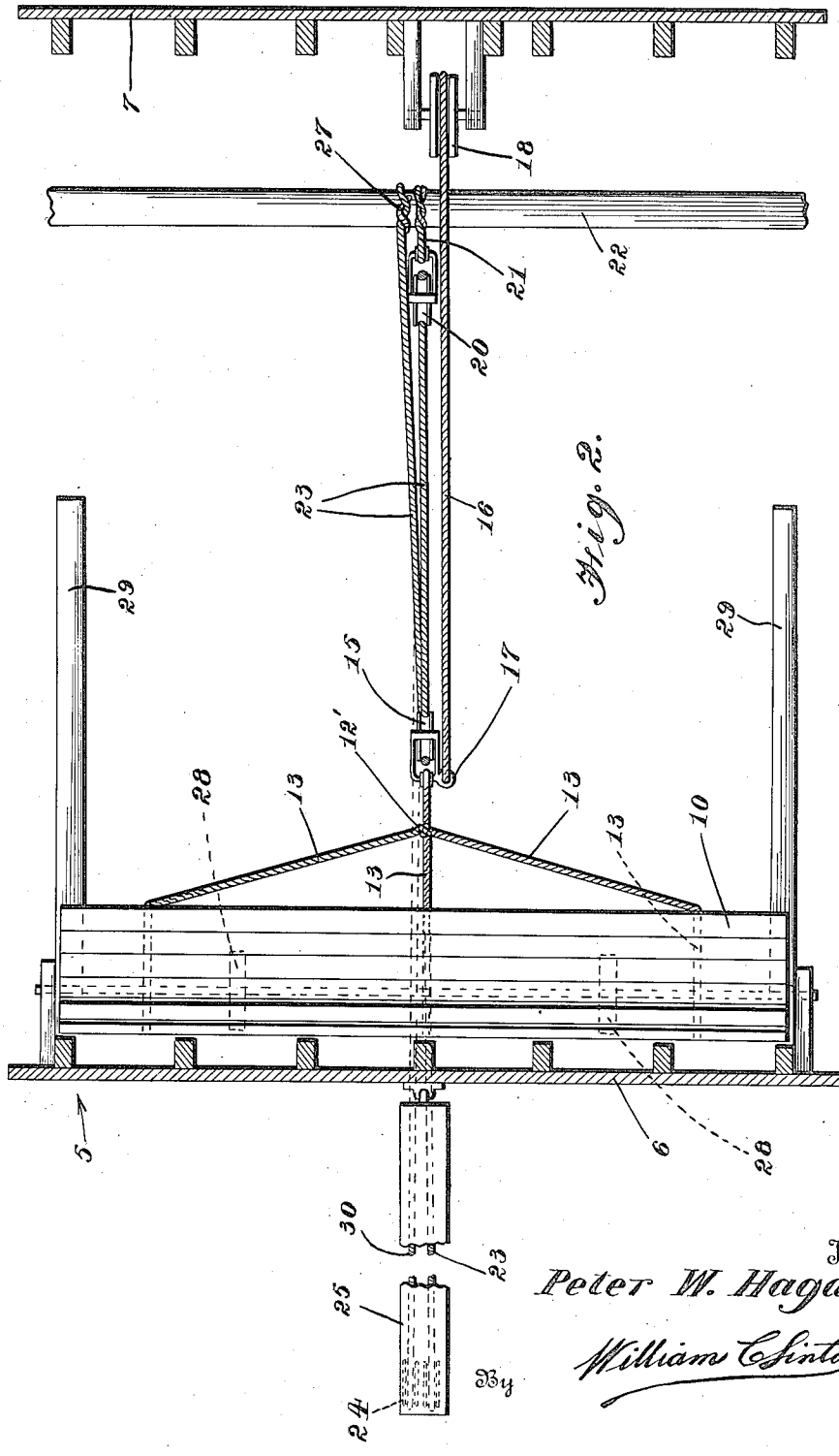


Fig. 2.

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Patented Mar. 11, 1924. 1,486,742

UNITED STATES PATENT OFFICE.

PETER W. HAGAN, OF SASKATOON, SASKATCHEWAN, CANADA.

GARAGE DOOR.

Application filed June 14, 1922. Serial No. 568,291.

To all whom it may concern:

Be it known that I, PETER W. HAGAN, a subject of the King of Great Britain, residing at Saskatoon, in the Province of Saskatchewan, Canada, have invented certain new and useful Improvements in Garage Doors; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to new and useful improvements in garage doors and more particularly to a door which can be readily opened and closed and retained in its open and closed positions.

Another object of the invention is the provision of a garage door which is of such construction that the same can be extended upwardly over suitable guide members to a point adjacent the ceiling or roof of the garage out of the path of the vehicles entering the same.

A further object of the invention is the provision of means for raising and lowering the door, together with suitable counterbalancing means for retaining the door in its various positions.

A still further object of the invention is the provision of a garage door including a plurality of connected strips or slats so arranged that the door may pass over suitable supporting pulleys at the upper end of the door-way and into engagement with a track mounted thereabove whereby it will be supported out of the path of the vehicles entering the garage.

With the above and other objects in view, the present invention resides in the novel features of construction, formations, combinations, and arrangements of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawings forming a part of the present application, and in which:

Figure 1 is a longitudinal sectional view taken through a portion of the garage showing the invention applied thereto; and,

Figure 2 is a horizontal sectional view showing the door and operative mechanism in plan view.

Referring now to the accompanying drawings by corresponding characters of reference throughout the several views, the numeral 5 designates in general a garage which comprises the front and rear walls 6 and 7, the former of which is provided with a suitable door opening shown at 8. A vertical channel 9 is provided at each side of the door opening 8 and in this channel is slidably mounted a door 10. This door 10 comprises a plurality of slats 11 provided with tongue grooved connections 12 at the edges thereof by means of which they are sealed against the entrance of air and the like when in closed position.

A plurality of flexible connecting members 13 extend through the central portions and opposite ends of the slats or strips 11 and are connected together, as shown at 12′ at the upper end of the door in spaced relation thereto. Adjacent the connected point 12′ these members 13 are connected by a short piece 14 to the forward end of a pulley 15. A cable 16 is likewise connected, as shown at 17 at one end thereof to the pulley, while the opposite end thereof passes over a pulley 18 mounted on the wall 7 and has attached to its depending end a weight 19 which serves to counterbalance the weight of the door.

A pulley 20 is connected as shown at 21 to a cross beam 22, while a cable 23 passes over this pulley 20 and leads at one end thereof over a double pulley 24 mounted on a hanger 25 which extends outwardly from the garage. This cable 23 terminates in a depending end 26 positioned within the convenient grasp of the driver prior to his entrance to the garage. The opposite end of the cable 23 is attached as at 27 to the beam 22, while the intermediate portion thereof passes over the pulley 15. Obviously when the extended end 26 of the cable 23 is pulled downwardly the board 10 will be raised passing over the rollers 28 and upon the tracks 29 in which position they will be retained by the counter-weight 19. A second cable 30 is attached to the pulley 15 and passes over the opposite side of the double pulley 24 so that when it is desired to close the door by pulling on the depended end of the cable 30, the door will be returned to its closed position.

From the foregoing description, taken in connection with the accompanying drawings, it will be manifest that a door for garages and an operating mechanism therefor is provided, which will fulfill all of the necessary requirements of such a device, and

it should be understood in this connection that various minor changes in the specific details of construction can be resorted to within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus fully described the invention, what I claim as new and desire to protect by Letters Patent is:

The herein described door for garages including the combination with a building having a door opening therein, of vertical tracks secured to the opposite sides of the door-way, horizontal tracks extending from the upper ends of the vertical tracks, rollers interposed between said tracks, a door including a plurality of hinged slats mounted in the vertical tracks and movable over the rollers to the horizontal tracks, flexible members passing through the slats for pivotally connecting the slats together, a pulley attached to these flexible members, a cable attached to the pulley for forcing the door to lowermost position, a second cable attached to said pulley, a weight attached to the last mentioned cable, an additional pulley mounted in spaced relation to the door, a cable passing over said pulley and over the first mentioned pulley and attached at one end to a stationary member within the building and having its opposite end extended within reach of the operator whereby when the said cable is pulled, the door will be moved to raised position, substantially as and for the purposes set forth.

In witness whereof I have hereunto set my hand.

PETER W. HAGAN