

Apr. 10, 1923

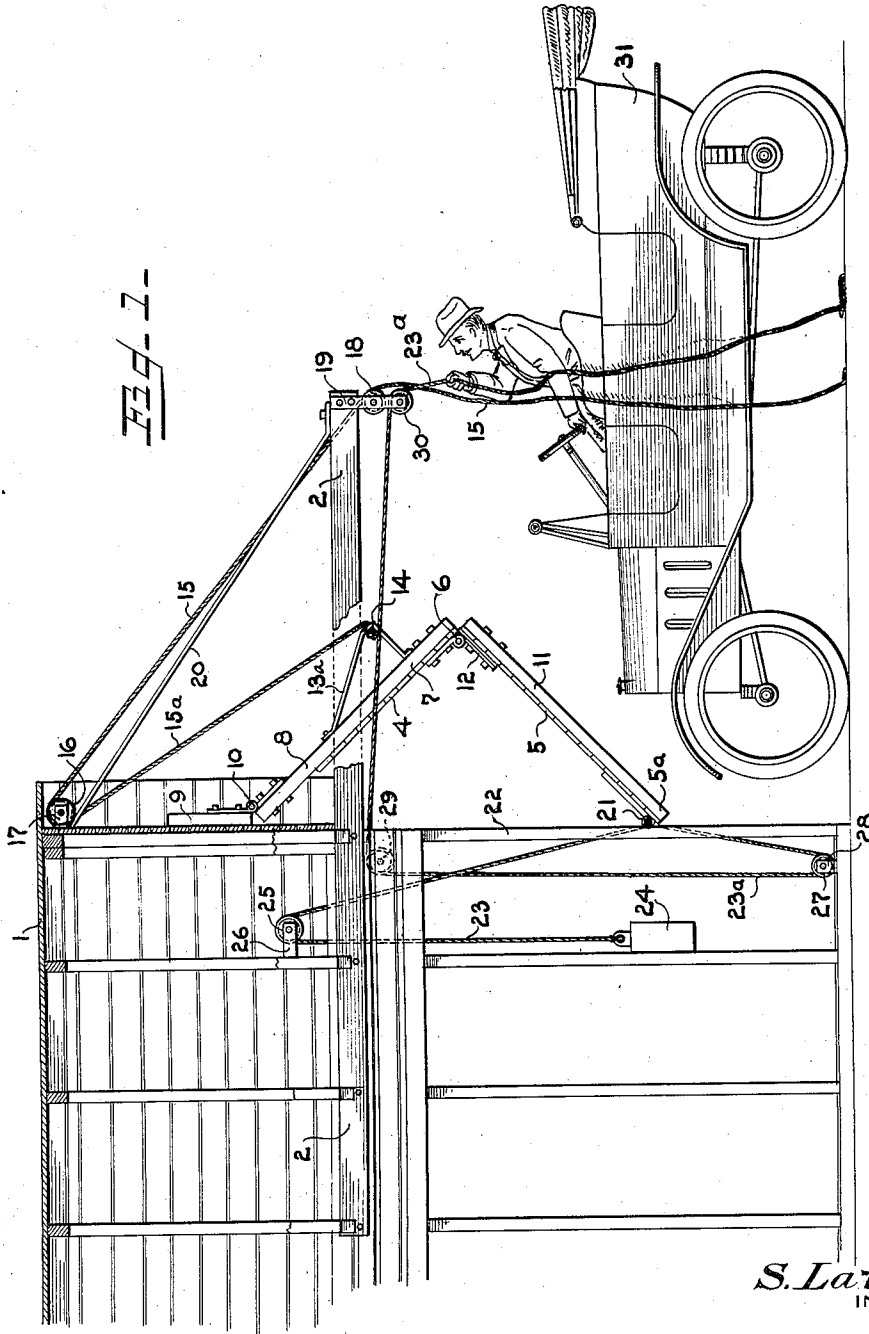
1,451,619

S. LATRACE

FOLDING DOOR FOR GARAGES

Filed Sept. 7, 1921

2 sheets-sheet 1



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WITNESSES  
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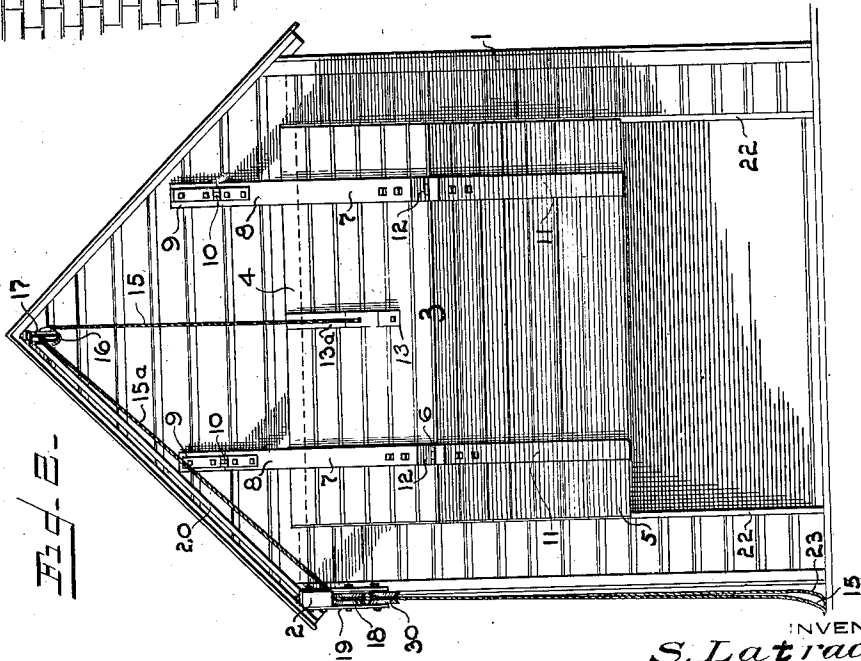
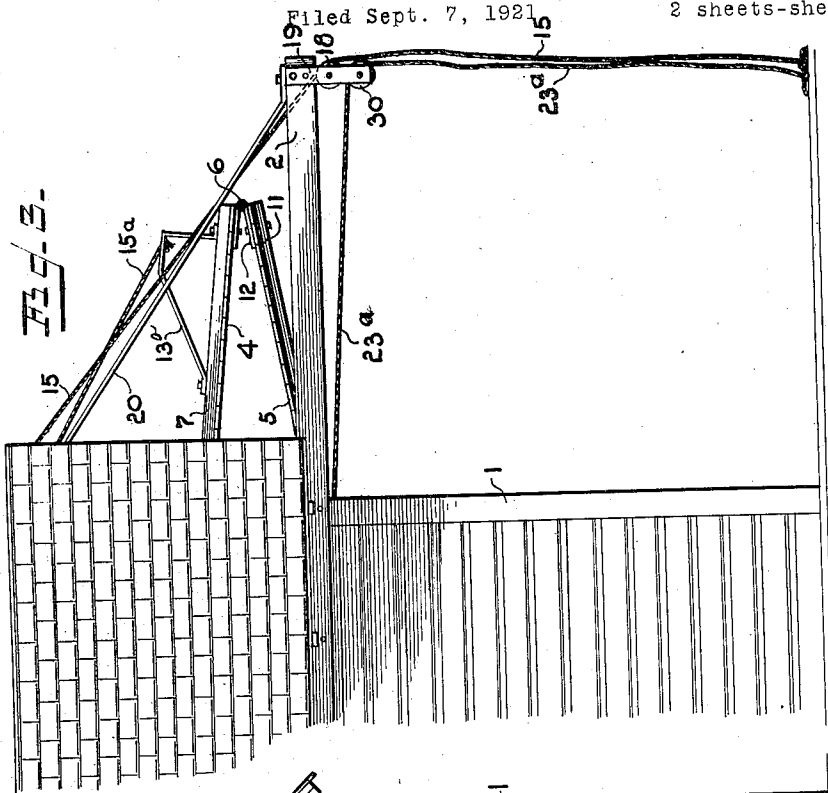
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# UNITED STATES PATENT OFFICE.

SEPTIAMUS LATRACE, OF SASKATOON, CANADA.

FOLDING DOOR FOR GARAGES.

Application filed September 7, 1921. Serial No. 499,013.

*To all whom it may concern:*

Be it known that I, SEPTIAMUS LATRACE, a citizen of the United States, residing at Saskatoon, in the Province of Saskatchewan and Dominion of Canada, have invented a new and useful Folding Door for Garages, of which the following is a specification.

This invention relates to folding doors, and is more particularly directed to a folding door for a garage.

An object of this invention is to provide a new and improved folding door for garages which may be operated at a distance from the front of the garage in order that it will be unnecessary for the driver to get out of his car either to open or close the door; and it further contemplates a new and improved device whereby not only a closure for the entrance of the garage is provided, but likewise a sheltering means when the door is open, which will direct rain or snow away from the entrance or protect a workman from the sun when doing any work in front of the garage.

The invention further contemplates a novel means for operating the folding door.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing in the drawing, but may be changed and modified so long as such changes and modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:—

Fig. 1 shows a side elevation of a garage with the parts broken away to show my improved mechanism applied to a garage.

Fig. 2 is a front elevation of a garage, showing the folding door partly open.

Fig. 3 is a side elevation of a garage showing the folding door in full open position serving as a sheltering means.

Referring to the drawing, 1 designates a garage provided with an outwardly-projecting support or beam 2, the inner portion of which is secured to one side of the garage in any approved manner.

Hingedly mounted upon the upper front portion of the garage is a folding door 3 comprising upper and lower sections 4 and

5, respectively. The sections 4 and 5 are hingedly mounted upon each other at 6.

The upper section 4 has two vertical brace bars 7, each provided with an extension 8. The ends of the extensions 8 are pivoted to the blocks 9 by means of hinges 10 for supporting the door. Brace bars 11 are also secured near the outer ends of the lower section 5 of the door and through which braces are passed the securing means for the lower leaves of the hinges 12 pivotally connecting the sections 4 and 5 of the door.

Upon a block 13<sup>a</sup> fastened on the outer portion of the upper section 4 of the door 3 is attached a bracket 13 to which is secured, at 14, a rope 15 leading upwardly and over a pulley 16 which is revolvably mounted in a bracket 17 secured to the upper portion of the front of the garage. The rope 15 is then directed downwardly to the outwardly-projecting end of the supporting beam 2 and there passed over a pulley 18 revolvably mounted in a depending bracket 19 supported upon the end of the beam 2. The rope is then carried downwardly sufficiently to be within reach of a person who desires to raise the door. The supporting beam 2 is braced by means of a stay 20 secured to one end of the beam 2 and also to the upper front portion of the garage.

The lower end of the section 5 of the door is provided with rollers 21 adapted to ride upon the front edges of the jambs 22 of the door and to prevent friction between the lower end of the door and the door jamb when the door is elevated or lowered.

A rope 23, upon the end of which is secured a counterbalance 24, is directed upwardly and over a pulley 25 mounted in a bracket 26 upon the interior of the garage, and then is directed downwardly and secured to the lower end of the lower section 5 of the folding door. Rope 23<sup>a</sup> likewise secured to the lower section 5 of the folding door is carried downward and passed around a pulley 27 mounted in a bracket 28 which is secured to the floor of the garage. Rope 23<sup>a</sup> is thence directed upwardly and over another pulley 29 which is likewise mounted in brackets secured to the side wall on the inside of the garage, and then directed outwardly through an opening in the front wall of the garage, and passed over a pulley 30 revolvably mounted in the bracket 19 on the end of the support 2. This rope 23<sup>a</sup> is extended down-

wardly sufficiently from the pulley to be within reach of a person who desires to lower the door and close the entrance to the garage.

As shown in Fig. 3, the entrance to the garage is open and the door is in elevated position and the upper section is inclined slightly downward from the front of the garage so that it may act as a portable sheltering means or cover for the space directly in front of the entrance of the garage.

The operation of my device is as follows: In Fig. 1, an automobile 31 is shown just beyond the entrance of the garage 1, with the driver pulling downwardly upon the rope 23<sup>a</sup>. This downward pull upon the rope 23<sup>a</sup> will raise that portion of the rope between the pulleys 27 and 29 and draw the end of the section 5 of the door downwardly, raising the counterbalance 24, when the door will be neatly closed against the entrance.

If it be desired to enter the garage, the rope 15 will likewise be drawn downwardly, when the section 15<sup>a</sup> of the rope will be raised, drawing the section 4 of the folding door upwardly and outwardly from the garage and also the section 5 will be elevated, but since the rope 23 is secured to the end of the section 5, the counterbalance 24 having a tendency to descend will readily cause the lower end 5<sup>a</sup> of the section 5 to be raised until the folding door is shown as elevated in the position illustrated by Fig. 3 of the drawing.

It will be seen that it will be unnecessary for the driver of a car, when leaving the garage, to get out of his car to close the door, since he may pull upon the rope 23<sup>a</sup> and thus close the door again; or if he desires to enter the garage, the door being closed, he may pull upon the rope 15, when the door will be elevated and raised out of his way.

A folding door of this type may readily operate since any obstructions, such as snow or ice, that happen to be near the door will not interfere with its operation, the door being lifted above the obstructions instead of being swung outwardly into the same. The raised position of the door, shown in Fig. 3, provides protection from rain or snow when working near the door to repair any part of the car. It is here noted that the two sections of the door are disposed at an acute angle to each other when in the raised open position.

What is claimed is:—

1. A folding door for a garage comprising upper and lower door sections hingedly connected to fold one above the other at an angle to each other when in open position, with the upper section hingedly mounted at one end on the front of the garage and extending outwardly therefrom in a downwardly inclined position, and the lower section having rollers at its inner end

bearing on the front of the garage, the two sections providing, when in raised position, a sheltering means for the front of the doorway, a counterbalance connected to the lower door section, a rigid beam extending outwardly from the front of the garage and of greater length than either door section so as to project beyond the door sections when the latter are folded, pulleys mounted on the beam, and a pair of ropes passed over the pulleys and both depending from the beam, one of said ropes being connected to the upper section for opening the door and the other rope being connected to the lower section for closing the door.

2. In a folding door for a garage, a rigid support secured to the side of the garage and extending outwardly from the front of the same, and upper and lower sections of a door hingedly mounted upon each other and also hingedly supported on the front of the garage, a rope connected to the lower section of the door and directed over a pulley, a counterbalance secured to the inner end of the rope, a second rope secured to the lower section of the door, supported by and depending downwardly from the outer end of the support and directed over spaced pulleys, said rope being adapted when operated to close the garage door, a third rope directed over a pulley on the end of the projecting support and over a pulley mounted on the garage, one end of said last-mentioned rope being secured to the upper section of the door, the other end of said rope depending downwardly from the end of the support in juxtaposition to the outer end of the second-mentioned rope, said third rope being adapted when operated to open and fold the door, said door when in open position being arranged above the doorway and projecting outwardly over the latter thereby providing an inclined roof whereof the door of the garage is formed.

3. A folding door for a garage, comprising a pair of door sections hingedly mounted upon each other, one of said sections being hingedly mounted on the front of the garage above the door opening, a counterbalance connected to the other door section, and means for raising and folding the door sections one above the other and above the door opening, the said door when in raised position having its sections so positioned that one of said sections is located directly beneath the other section with the upper section inclined downwardly away from the front of the garage to provide a sheltering means for the space in front of the door.

4. A folding door for a garage, comprising upper and lower sections hingedly con-

5 nected to fold one above another at an  
angle when in open position, the upper  
section being hingedly mounted at one end  
on the front of the garage above the door  
opening and the lower section extending at  
an angle to the upper section and bearing  
on the outside of the garage, a rigid sup-  
port extending outwardly from the garage  
and projecting beyond the sections when  
10 folded, rollers on the lower end of the  
lower section to run on the door jambs,  
a rope connected to the lower door section  
and directed over a pulley, a counterbal-  
ance secured to the free end of said rope,  
15 a second rope secured to the lower section  
of the door and supported by and depend-  
ing downwardly from the outer end of the

support and adapted when operated to  
close the garage door, and another rope di-  
rected over a pulley on the end of the pro- 20  
jecting support and over a pulley mounted  
on the garage, one end of said last-men-  
tioned rope being secured to the upper door  
section, said last-mentioned rope being 25  
adapted when operated to open and fold  
the door, said door sections when in open  
position above the door opening providing  
an inclined roof whereby a sheltering means  
for a space in front of the door of the 30  
garage is formed.

In testimony, that I claim the foregoing  
as my own, I have hereto affixed my sig-  
nature.

SEPTIAMUS LATRACE.