Aug. 19, 1930. C. H. SCHNEIDER 1,773,634

GARAGE DOOR HANGER

Filed July 21, 1928

Fig. 1

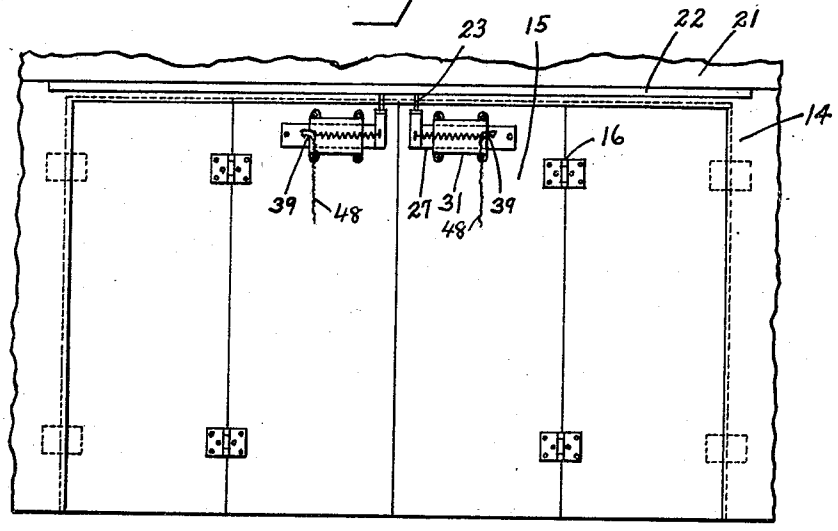



Fig. 2

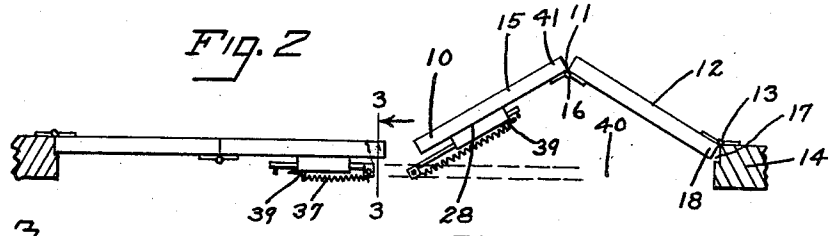



Fig. 3

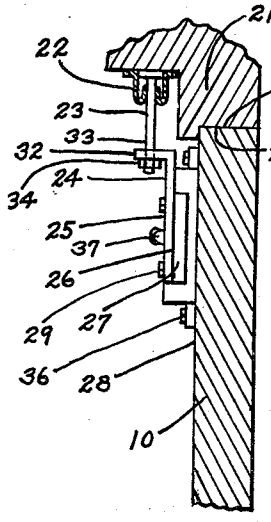



Fig. 4

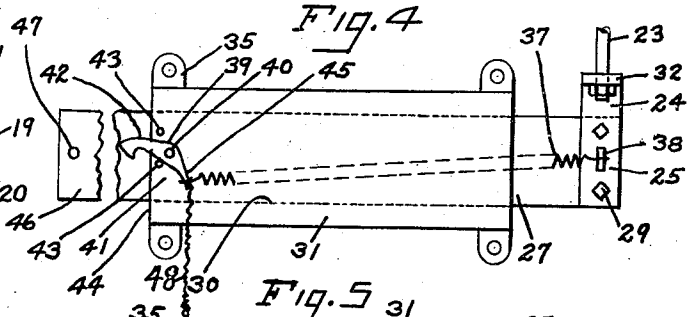
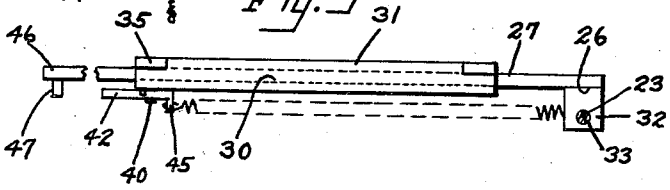



Fig. 5




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# UNITED STATES PATENT OFFICE

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## GARAGE-DOOR HANGER

Application filed July 21, 1928. Serial No. 294,449.

My invention relates to improvements in garage door hangers for use with doors made up of sections that are hinged together and in which one section is hinged to the door casing, and the object of my improvement is to produce a garage door hanger that is provided with means for operatively supporting the free end portion of the door structure and at the same time permits the door structure to open outwardly from the garage structure and in the closed position to fit by the upper edge portion against the lintel directly or into a recess provided therein, involving in the preferred form a supporting bar that is slidably mounted on the free end door section.

In the accompanying drawing:—

Figure 1 is a rear elevation or inside view of a garage door structure that is equipped with door hangers embodying my invention and comprising for the door-way two hinged door structures that open respectively one to the right and the other to the left.

Figure 2 is a plan or top-edge view of the door structures, one being shown in partially opened position, and the track being indicated by broken lines.

Figure 3 is a sectional view on an enlarged scale of the upper portion of the door and adjacent parts on the line 3—3 of Fig. 2.

Figure 4 is a side elevation of the sliding bar and the adjacent parts.

Figure 5 is a top edge view of the same.

My improved garage door hanger is used to operatively support the free end portion 10 of a door structure 11 that is composed of two sections that are hinged together. Said sections comprise the outer section 12 that is connected by hinges 13 to the jamb 14 so as to swing outwardly from the garage structure and the inner section 15 that is connected by means of hinges 16 with the said outer section 12.

The outer edge portion 18 of the outer section 12 fits within a recess 17 in the jamb 14 and the entire top edge portion 19 of the door structure 11 fits within a recess 20 of the lintel 21.

The means for supporting the free end portion 10 comprise an overhead track 22 that is located on the inner side of the lintel 21, in parallelism therewith, and is supported in any proper manner so as to be positioned slightly above the door-receiving recess 20 in said intel 21.

The track 22 operatively supports a carriage 23 of common form and dependent from said carriage 23 is a hanger 24 that supports the weight or load of the free end portion 10. Said hanger 24, as shown, is in the form of a plate or strap for the lower and major portion 25 and said lower portion 25 is rigidly connected to the free end portion 26 of a plate-like bar 27 that is operatively mounted on the inner face 28 of the inner free end section 15 of the door structure 11.

The bar 27 is of appreciable width and is opposed flat-wise to the door face so that it operates edgewise in sustaining its load.

Bolts 29 or the like secure the hanger 24 to the bar 27.

The bar 27 slides in a way 30 in a housing 31 and which is appreciably elongated so as to provide for ease of movement and relatively free operation, and at the same time to prevent sagging under conditions of use.

The upper portion 32 of the hanger 24 is in the form of a branch that extends horizontally from the upper end of the lower portion 25 and is perforated to admit a stud 33 that serves as means for providing a swivel connection with the carriage 23. The branch 32 rides on a nut 34 that is screwed onto the stud 33.

The carriage 23 with the swivel-connected hanger 24 are standard products, in common use, as well as the track 22.

The bar housing 31 is in the form of a single casting that is cored to provide the way 30, and is provided with a set of lugs 35 for supporting screws 36.

A spring 37 may be provided for taking up slack or the like and easing the action in opening and closing and is connected by one end to a lug 38 on or near the hanger 24 and at the other end to a member 39 to be described on the housing 31.

The structure described permits of a free and open doorway space, free from posts or the like, for a door space for two door struc-

tures, each of the latter being composed of a pair of hinged sections.

The two door structures are arranged, as shown, to open towards the two sides, one towards the right and the other towards the left.

In opening the door the section edges 41 that are connected by the hinges 16 move outwardly from the doorway space 40 and the free end section 15 is supported by the sliding bar 26 against sagging and is virtually tied to the track. Said bar 26 bridges the gap on the under side of the lintel, between the track and the outer face of the lintel.

The spring 37 tends to pull the bar 27 inwardly within the housing 31 in the direction corresponding to the closing of the door, so that in opening the door said bar is pulled outwardly in opposition to the spring. The connection of one end of the spring 37 to the lug 38 on the hanger 25 serves to operatively connect the spring to the bar 27. The other end of the spring 37 may be connected to the bar housing 31 directly and permit the spring to serve the useful functions already mentioned.

The spring 37 serves an additional useful function as a catch spring for locking the bar and housing relatively one to the other when in the open position, with the bar pulled to the limit along said housing. This is done by having the connection of the spring end with the housing made indirectly, through the medium of the catch member or lever 39 already mentioned.

Said lever 39 is pivotally mounted by means of a pin 40 on the outer face of the end portion 41 of the housing 31; has a catch-nose or hook-nose 42 that plays between two limiting stops 43 and overhangs the adjacent edge 44 of the housing 31; and that has on the side generally opposite to the nose 42 an inclined operating arm 45 that is connected to the spring 37.

The bar 27 overhangs the housing edge 44 by its end portion 46 and is provided on the side face of said end portion with a keeper lug 47 that lies in the path of the catch nose 42 so as to be adapted to cooperate therewith when the bar is drawn through the housing to the prescribed limit and then serve to virtually lock the bar and the housing together. When so checked the door is held against accidental closing, as by the wind or the like.

Thus the spring 37 tends to position the lever 39 and the parts are constructed and arranged so that as the bar housing moves outwardly from the door casing as the door is opened and the bar is slid along the housing the nose 42 automatically engages the keeper 47 when the limit of the movement is reached.

For releasing the catch-lever 39 the inclined arm 45 may be utilized by means of a chain 48 or the like that depends therefrom. A pull on said chain 48 lifts the nose 42 and permits of sliding the bar along the housing as the door is closed.

I claim as my invention:—

1. A garage door hanger for supporting the free end of a two-section door comprising a track adjacent and parallel to the lintel and a carriage supported therefrom, a bar mounted for sliding transversely along one face of the free end portion of said door, and said bar being operatively connected to said carriage.

2. In a garage door structure, a door casing, door structures hinged one at each side of said casing and having each a free end portion that in the closed position is opposed to the free end portion of the other door, each of said doors being composed of two sections that are hingedly connected, said doors being supported for swinging outwardly from the garage structure, a track supported on the inner side of said door casing and having a carriage for each of said doors, and means for supporting said free end portions from said carriage and track comprising individually a bar structure that is mounted for transverse sliding movement to the opposed face of the door.

3. In a garage door hanger for supporting the free end of a two-section door, a housing mounted on the face of the door, a track adjacent the lintel and a carriage supported therefrom, and a relatively elongated bar operatively connected by one end to said carriage and having the body portion adapted for sliding movement in said housing.

4. In a garage door hanger as described in claim 3 a relatively elongated spring connected by one end to said bar and having the other end connected to the structure of said housing.

5. In a garage door hanger structure, a housing and a bar sliding therein, a moving latch member pivoted to said housing and a keeper on said bar cooperating to engage one another for checking such sliding movement in one direction, a spring connected by one end with said bar and operating to tend to pull said bar along said housing in opposition to said latch member and keeper, and the other end of said spring being connected to said moving latch member so as to tend to position the same to the checking position and also provide an operative connection that is substantially effective as a connection with the structure of said housing.

CHARLES H. SCHNEIDER.