April 27, 1926. 1,582,265

J. C. GRIFFIN

DOOR CATCH

Filed Nov. 19, 1923

Fig. 1.

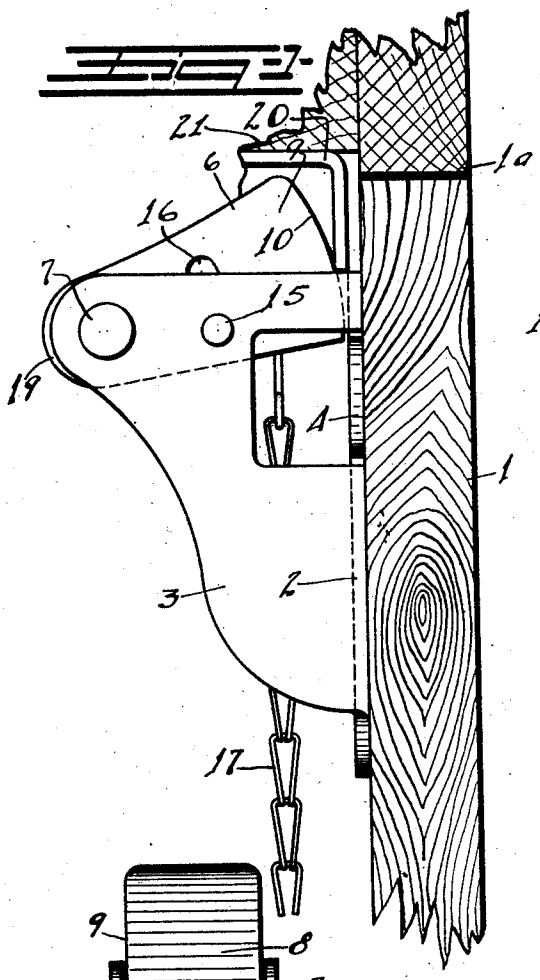


Fig. 2.

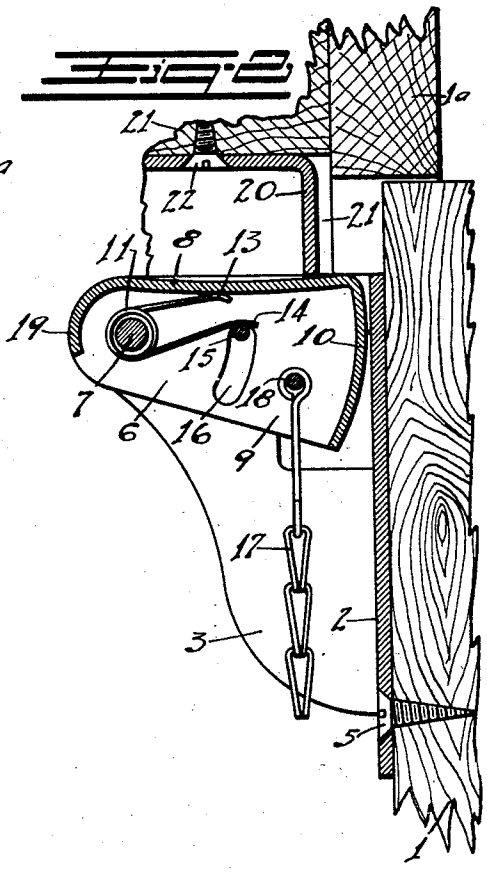


Fig. 3.

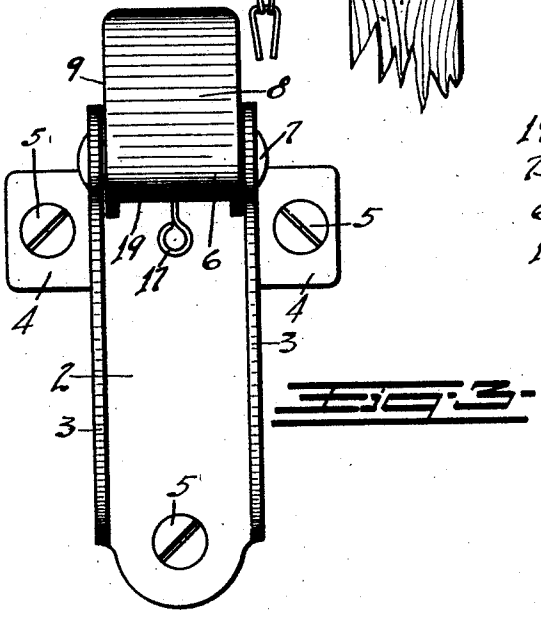
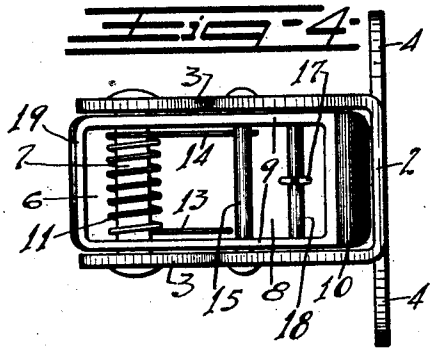


Fig. 4.



Inventor

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By W. C. Lind Attorney

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UNITED STATES PATENT OFFICE.

JAMES C. GRIFFIN, OF ERIE, PENNSYLVANIA.

DOOR CATCH.

Application filed November 19, 1923. Serial No. 675,554.

To all whom it may concern:

Be it known that I, JAMES C. GRIFFIN, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Door Catches, of which the following is a specification.

The invention is designed to take the place of spring actuated bolts and give greater range of clearance. It is particularly desirable for use in relation to such doors as garage doors where the catch is arranged at the top of the door. The latch in the present construction is pivotally mounted and consequently there is little resistance to the yielding of the latch in the closing of the door. Features of the invention will appear from the specification and claims.

The invention is illustrated in the accompanying drawings as follows:—

Fig. 1 shows a side elevation of the catch.

Fig. 2 a central section of the catch.

Fig. 3 a front elevation.

Fig. 4 a bottom view of the catch.

1 marks the door and 1ª the casing. The catch is mounted in a frame having a base 2 with side walls 3. Securing ears 4 extend from the base, these ears being formed of metal struck from the side walls. These ears are perforated and screws 5 extend through these ears and through the bottom of the base forming means of securing the frame to the door.

The latch 6 is pivoted on a pin 7. It has a base 8 with side walls 9 bent up from the base and a locking base 10 which is formed of metal bent from the base and secured along the edges to the side walls.

A spring 11 is coiled around the pivot pin 7 and has an end 13 operating against the base and the opposing end 14 resting on a pin 15 extending between the side walls of the frame. The pin 15 extends through stop slots 16 in the side walls 9 of the latch. The spring yieldingly throws the latch to the locking position shown in Fig. 1 and permits the latch to yieldingly swing between the side walls as the door is closed as shown in Fig. 2. A chain 17 extends from the latch, the latch having a pin 18 extending between the side walls to which the chain is secured. The rear end of the latch is closed at 19 to improve the appearance. This is formed from an extension of the wall of the base.

A catch 20 is arranged in a portion of the door stop 21, being ordinarily provided with a piece of angle iron which may be readily secured to the frame by a screw 22.

In operation it will be seen that as the door is closed the catch 20 will engage the face of the latch and force it downwardly thus allowing the latch to clear the catch. As the door reaches the door stop the latch swings upwardly to the position shown in Fig. 1, thus locking the door in closed position. The latch can be readily operated by the chain from the ground.

What I claim as new is:—

1. In a door catch, the combination of a frame comprising a base and side walls extending outwardly from the base, the base having securing ears formed intermediate the ends of the sides and from metal entirely within and spaced from the margins of the side walls and extending outwardly beyond the side walls; and a latch pivoted between the side walls.

2. In a door catch, the combination of a frame comprising a base and side walls extending outwardly from the base; and a latch pivoted between the side walls with its pivot at the end of the latch most remote from the base, the latch being formed of sheet metal and comprising a base extending at right angles to the frame base with flanges extending therefrom parallel with the walls of the frame and swinging within the frame along the face of the base of the frame.

3. In a door catch, the combination of a frame comprising a base and side walls extending outwardly from the base; and a latch pivoted between the side walls with its pivot at the end of the latch most remote from the base, said latch being formed of sheet metal and comprising a base extending at right angles to the frame base having flanges extending therefrom parallel with the walls of the frame and swinging within the frame along the face of the base of the frame, said latch having a locking face formed between the side walls adjacent to the frame base and at the opposite side of the latch from its pivot.

4. In a door catch, the combination of a frame comprising a base and side walls extending outwardly from the base; a latch pivoted between the side walls, the latch being formed of sheet metal and comprising a base with flanges extending therefrom parallel with the walls of the frame and swing-

ing within the frame at right angles to the base of the frame, the side walls being provided with a stop slot; a pin forming a pivotal mounting for the latch; a spring yieldingly holding the latch in protruding position; and a pin operating in the stop slot to limit the movement of the latch.

5. In a door catch, the combination of a frame comprising a base and side walls extending outwardly from the base; a latch pivoted between the side walls, the latch being formed of sheet metal and comprising a base extending at right angles to the frame base with flanges extending therefrom parallel with the walls of the frame and swinging within the frame along the face of the base of the frame; and a pull device suspended from the latch and extending between the flanges through the catch.

6. In a door locking mechanism, the combination of a casing having a stop; a door swinging in the casing against the stop; a catch secured to the casing and conforming to the stop; a latch mechanism carried by the door comprising a frame; a swinging latch in the frame adapted to swing at right angles to the direction of movement of the door, said latch engaging the catch as the door is closed; a chain extending from the latch; and a spring returning the latch to locked position.

In testimony whereof I have hereunto set my hand.

JAMES C. GRIFFIN.