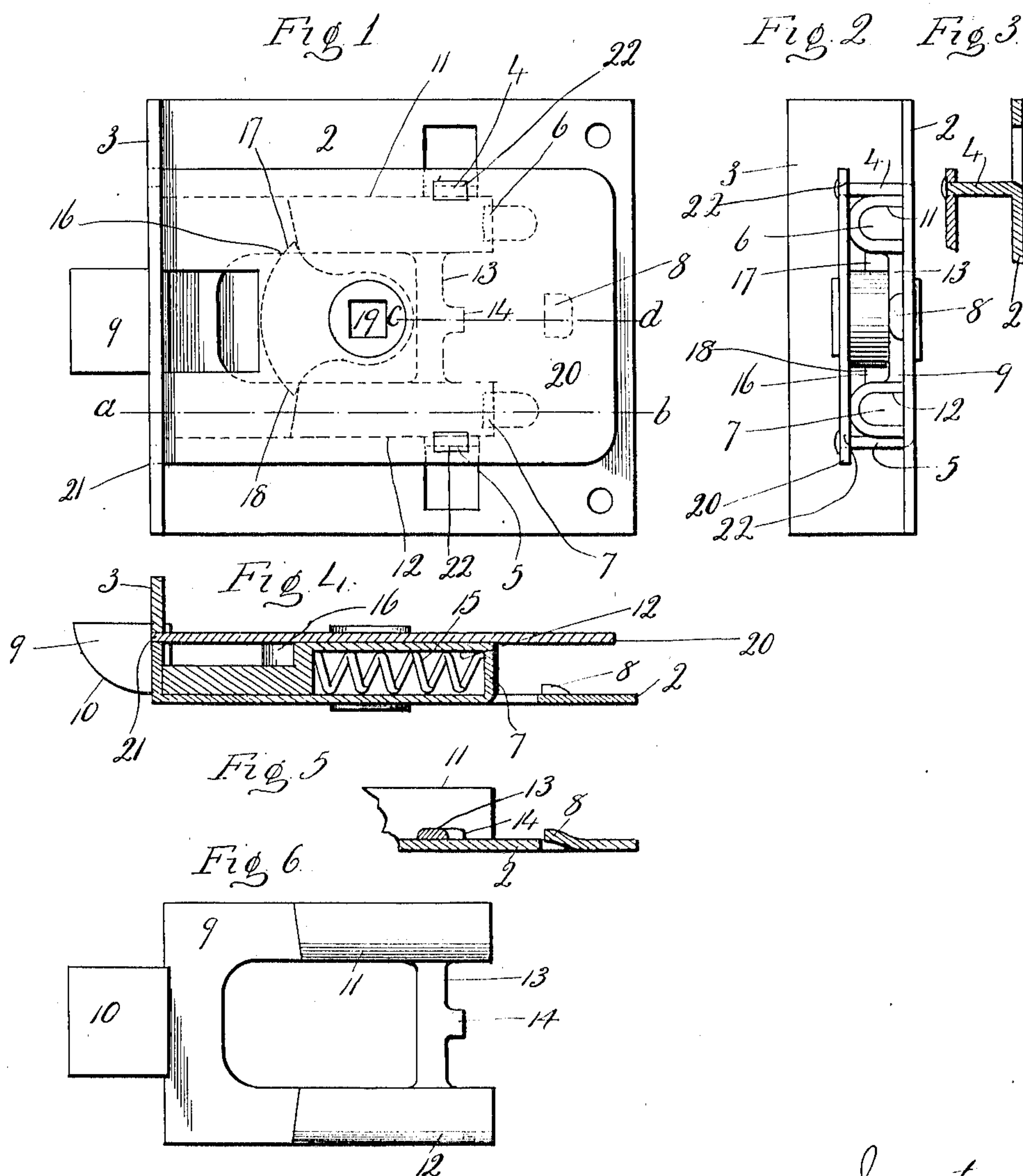


F. C. ALTMANN.
LATCH.
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970,007.

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Witnesses
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LATCH.

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To all whom it may concern:

Be it known that I, FRANK C. ALTMANN, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Latches; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 an inside view of a latch constructed in accordance with my invention. Fig. 2 a rear view of the same. Fig. 3 a broken sectional view illustrating the connection between the latch plate and cap. Fig. 4 a sectional view on the line *a—b* of Fig. 1. Fig. 5 a broken sectional view on the line *c—d* of Fig. 1. Fig. 6 a plan view of the bolt detached.

This invention relates to an improvement in latches for vehicle doors and particularly to latches of the so called knob type as distinguished from latches of the lever type.

The object of the invention is to construct the latch case and plate from sheet metal, and the invention consists in certain details of construction and arrangement of parts as will be hereinafter described and particularly recited in the claims.

In carrying out my invention I employ a case-plate 2 formed from sheet metal and provided with an integral face-plate 3 provided with the usual latch bolt opening. This plate is formed with posts 4 and 5 struck inward from the plate and reduced at their ends for the purpose as will hereinafter appear. The plate is also formed with two spring stops 6 and 7 and a bolt stop 8 struck inward from the plate. The bolt 9 has the usual beveled nose 10 which projects through the face plate and is formed on opposite sides with spring chambers 11 and 12 which fit between the posts 4 and 5 which form guides for the bolt. The chambers are connected by a bar 13 having a finger 14 adapted to engage with the bolt-stop 8 to limit the inward movement of the bolt. Within the chambers 11 and 12 are spiral springs 15 which at their forward ends bear

against the bolt, and at their rear ends against the spring stops 6 and 7 which close the inner ends of the said spring chambers. A roll-back 16 is located between the spring chambers 11 and 12 and this roll-back has the usual arms 17 and 18 which engage respectively with the forward ends of the spring chambers 11 and 12, whereby movement of the roll-back will withdraw the bolt. This roll-back has the usual angular opening 19 for a knob spindle. The mechanism is inclosed by a cap-plate 20 formed from sheet metal and having at its forward edge lugs 21 to enter openings formed for them in the face-plate 3, and with perforations 22 to set over the reduced ends of the posts 4 and 5 which are riveted down to hold the case-plate in position. The hub of the roll-back projects through this plate and through the case-plate in the usual manner of knob latches. It will thus be seen that the case-plate with its front face and the cap-plate are formed from sheet metal and the necessary stops or guides formed integral with the case-plate.

I claim:—

1. A latch comprising a sheet metal case-plate formed with an integral face-plate said case-plate provided with posts and spring stops struck inwardly therefrom, a bolt having a beveled nose projecting through the face-plate, said bolt formed on opposite sides with spring chambers, springs in said chambers and bearing against the bolt and said spring stops, a cap-plate secured to said posts, and a roll-back located between the case-plate and cap-plate and adapted when turned to withdraw the bolt.

2. A latch comprising a case-plate formed from sheet metal and provided with an integral face-plate, said face-plate formed with a bolt-opening and with perforations above and below it, said case-plate also formed with posts, spring stops and bolt stop struck inward therefrom, a bolt formed with a beveled nose projecting through the face-plate and on opposite sides with spring chambers adapted to pass between the said posts, springs in said chambers and bearing against the bolt and against said spring stops, a finger adapted to engage with the bolt stop to limit the inward movement of

the bolt, a cap-plate engaged with perforations in the face-plate and with the said posts, and a roll-back mounted between the case-plate and cap-plate and provided with
5 arms adapted to engage with the forward ends of said spring chambers whereby by the turning of the roll-back the bolt may be withdrawn.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses. 10

FRANK C. ALTMANN.

Witnesses:

F. J. LINSLEY,
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