July 11, 1933. W. C. DEVEREAUX 1,917,437

DOORLATCH CONSTRUCTION

Filed Oct. 31, 1930 2 Sheets-Sheet 1

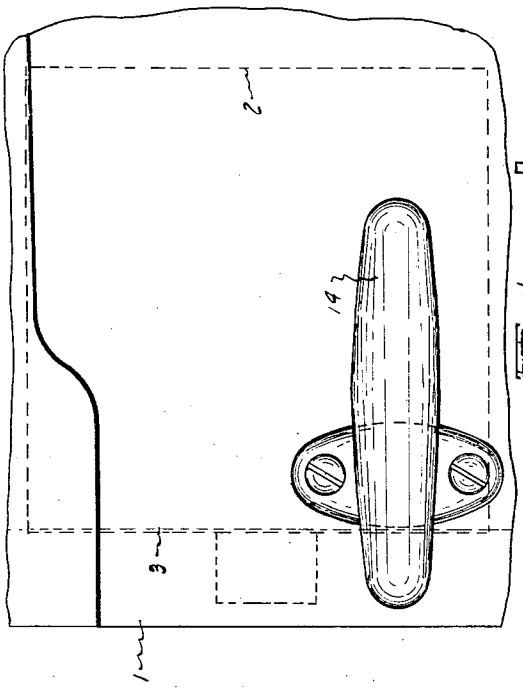


FIG-1

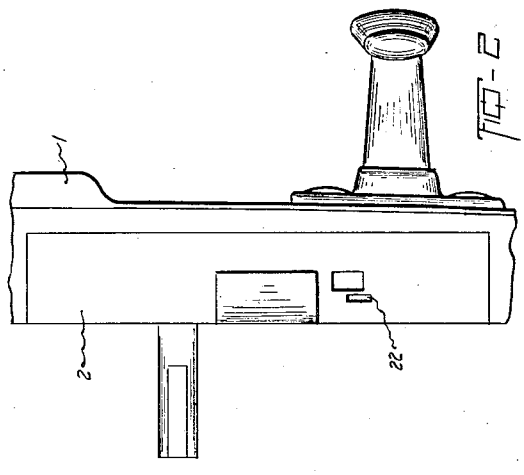


FIG-2

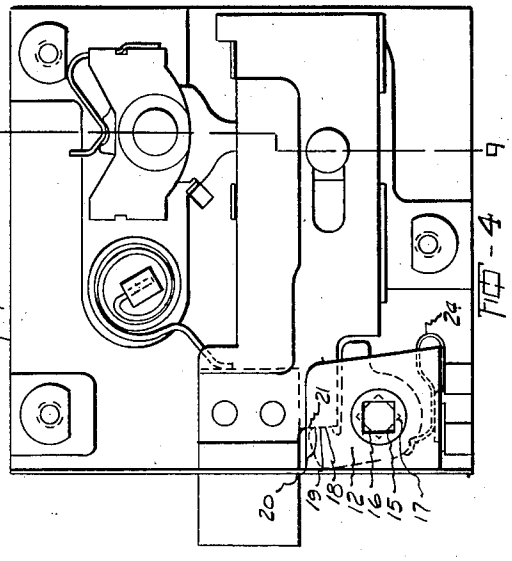


FIG-4

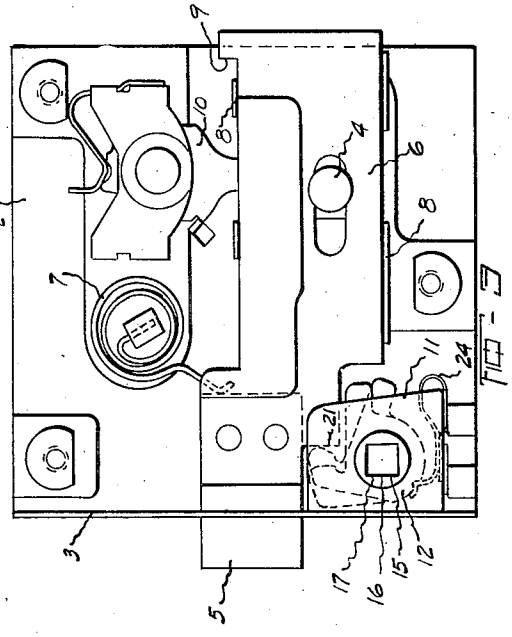


FIG-3

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DOORLATCH CONSTRUCTION

Filed Oct. 31, 1930 2 Sheets-Sheet 2

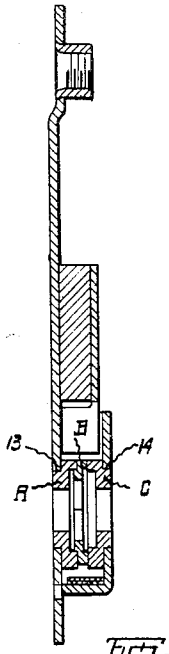


FIG. 5

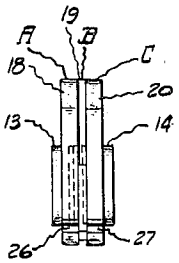


FIG. 7

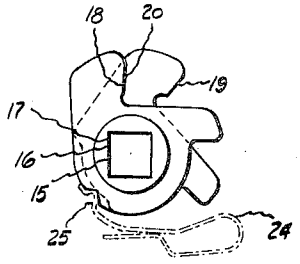


FIG. 6

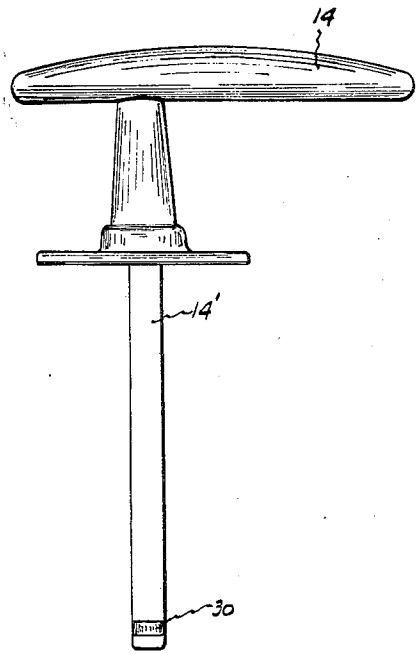


FIG. 8

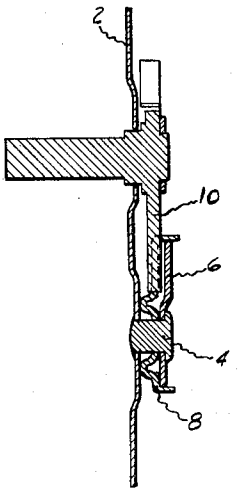


FIG. 9

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Patented July 11, 1933

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UNITED STATES PATENT OFFICE

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DOORLATCH CONSTRUCTION

Application filed October 31, 1930. Serial No. 492,563.

This invention relates generally to door latches and refers more particularly to the outside handle and rollback assemblies of vehicle door latches.

One of the essential objects of the invention is to provide an assembly of this type in which the stem of the outside handle is connected directly to the rollback by a section of the latter.

Another object is to provide an assembly in which the section utilized for connecting the stem to the rollback is actuated automatically to establish such connection.

Other objects, advantages and novel details of construction of this invention will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawings, wherein:

Figure 1 is a fragmentary elevation of a door with latch mechanism embodying my invention applied thereto;

Figure 2 is a fragmentary edge elevation of the construction illustrated in Figure 1;

Figure 3 is a fragmentary side elevation of the latch mechanism with the latch bolt and shank partially retracted;

Figure 4 is a view similar to Figure 3 but showing the latch bolt and shank in fully projected position;

Figure 5 is a fragmentary vertical sectional view through the latch mechanism.

Figure 6 is a detail elevation of the rollback and showing the respective sections thereof in proper position to receive the stem of the outside handle;

Figure 7 is an edge elevation of the construction illustrated in Figure 6;

Figure 8 is a detailed view of the outside handle and stem.

Figure 9 is a section taken on the line 9—9 of Figure 4.

Referring now to the drawings, 1 is a door; 2 is a latch case plate secured to the inner side of the door and having a lateral flange 3 at its forward edge secured to the free edge of the door. 4 is a pin projecting laterally from the case plate, and 5 is a latch bolt extending through an opening in the flange 3 for engagement with a suitable keeper (not shown) and having a shank 6 slidably mounted on the pin 4; 7 is a spring anchored on the case plate and normally holding the latch bolt in projected position; 8 is a plate slidably mounted upon the shank 6 and engageable with a shoulder 9 thereof to effect the retraction of the bolt; 10 is a rollback operable from the inner side of the door and adapted to actuate the plate 8 against the shoulder 9; 11 is a cover plate arranged in spaced relation to the case plate and rigidly secured thereto, and 12 is a rollback located between the cover plate and case plate and adapted to be operated from the outer side of the door by means of the handle 14 and stem 14′ to effect a retraction of the bolt.

In the present instance the rollback 12 comprises three sections A, B and C respectively that are substantially identical in configuration and are arranged side by side. Preferably the outer sections A and C have laterally projecting hub portions 13 and 14 respectively journaled in the cover plate 11 and case plate 2 and have aligned square openings 15 and 16 respectively at the center thereof. The intermediate section B is thinner than the outer sections A and C and is provided at the center thereof with a square-shaped opening 17 that is adapted to register with the aligned openings 15 and 16 in the sections A and C. As shown in Figure 4 the arm portions 18, 19 and 20 respectively of the sections A, B and C are normally held against the lateral flange 3 of the case plate by a shoulder 21 of the spring pressed shank 6 and the square opening 17 in the intermediate section is out of registration with the openings 15 and 16. However, when it is desired to assemble the handle 14 with the rollback the latch bolt 5 is pressed inwardly so that the shoulder 21 of the shank will be moved rearwardly from the arm portions 18, 19 and 20 of the rollback sections whereupon a suitable tool (not shown) may be inserted through a slot 22 in the lateral flange 3 of the case plate to turn the intermediate section B rearwardly so that the square opening 17 therein will be in registration with the openings 15 and 16 in the sections A and C. (See Figure 3.) A leaf spring 24 secured to the cover plate 11

has an arm portion 25 engaging aligned transversely extending notches 26 and 27 respectively in the lower edges of the sections A and C and holds the said sections stationary while the intermediate section B is swung rearwardly as just described. When the parts are in the position illustrated in Figure 3 the stem 14′ of the handle is inserted into the aligned openings 15, 16 and 17. The bolt 5 is then released and will cause the intermediate section B to be swung to the position illustrated in Figure 4. In doing so the square opening 17 in the intermediate section B will be moved out of registration with the openings 15 and 16 and the edges of said opening 17 will be received in an annular groove 30 in the stem. As a result the stem will be automatically connected to the rollback.

What I claim as my invention is:

1. In a door latch, a rollback comprising three sections arranged side by side, having square-shaped openings adapted to be in registration so as to receive the stem of an operating handle and having substantially identical arm portions adapted to be in registration for engagement with a bolt shank, the arm portion of one roll-back section being out of alignment with the arm portions of the other sections when the opening in said section is in registration with the openings in the other sections and adapted to be in alignment with the arm portions of the other sections when the opening aforesaid in said section is out of registration with the openings in the other sections.

2. A rollback comprising three sections, two of said sections being substantially identical and having registering openings and aligned arms, and the third section being similar in configuration to the other sections, having an opening registerable with the openings aforesaid in the other sections and having an arm registerable with the arms of the other sections, the construction and arrangement of the third section being such that the arm thereof is out of registration with the other arms when the openings therein is in registration with the openings in the other sections, and the opening therein is out of registration with the openings in the other sections when the arm thereof is in registration with the arms of the other sections.

In testimony whereof I affix my signature.

WILLIAM C. DEVEREAUX.