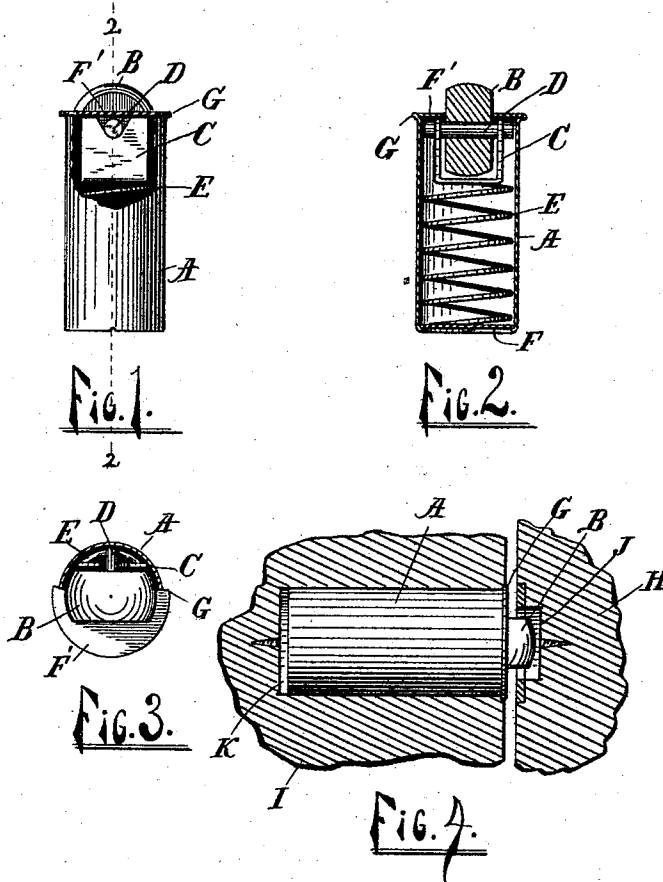


(No Model.)

F. W. TOBEY.
LATCH.

No. 498,413.

Patented May 30, 1893.



WITNESSES:

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LATCH.

SPECIFICATION forming part of Letters Patent No. 498,413, dated May 30, 1893.

Application filed October 8, 1892. Serial No. 448,202. (No model.)

To all whom it may concern:

Be it known that I, FRED W. TOBEY, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Door-Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to that class of fasteners having a yielding rounded projection designed to engage a depression in the part to which it is desired to secure the door or other device provided with the fastener.

The object of the invention is to cheapen the construction and at the same time increase the convenience and effectiveness of devices of this character. This object is accomplished by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a fastener constructed in accordance with my invention, a part of the case being broken away to disclose the interior parts. Fig. 2 is a vertical section on the line 2—2 of Fig. 1. Fig. 3 is an end view of the device, broken away at one side, and Fig. 4 is a side view of the fastener applied to a door, the latter being shown in section.

A is the cylindrical case, which is formed of a single integral sheet of metal, and has a fixed integral head, F', at its extreme forward end, said head closing said end of the case and being formed with an opening through which the roller, B, projects. Said forward end of the case is also formed with an outwardly-projecting flange, G. The closure, F, for the extreme rear end of the case is formed by bending inward toward the center the metal of the case. A case thus formed is simple, cheap, and, while it is made of sheet-metal, possesses the required strength and durability. The flange, G, strengthens the case and allows the fastener to be driven to place without liability of distorting or bending the case. It will be observed that the inner surface of the case is plane, there being no inward projections between its extreme ends.

C designates a yoke, made of a strip of metal bent twice at right angles near the middle, and

having its end portions parallel to each other and engaging the inner surface of the head F' in four substantially parallel and equi-distant lines, whereby said yoke is held in line with and is longitudinally movable in, said case, and the roll prevented from being crowded against the case A or head F'. Said yoke has notches in each end opposite each other, which notches engage the journal D of the roller B, the latter being kept in place in said notches by engaging at its ends the inner surface of the case A and at its sides the head F'.

E designates a coil spring, which abuts directly against the inner side of the yoke C at one end and the head F at the other end, whereby said yoke is pressed toward the forward end of the case and the forward end of the roller B projected therefrom through the opening in the head F'.

This device is applied in the usual manner by inserting the case A in a suitable opening K in the door or its casing, I, with the flange G engaging the surface of the same, said flange thereby serving as a stop as well as a strengthening means, or stiffening means. As the door closes the roll B is forced back into the case A, thus depressing the spring E, which spring in turn forces the roller forward into the depression, J, thus holding the door closed.

By the construction shown the device is cheaply constructed and of but few parts. The parts are easily assembled, as it is only necessary to place the roller B with its flange in the case so that the forward end of said roller will project through the opening in the head, F', then drop in the yoke C and spring E, and finally turn inward the extreme rear end of the case to form the head or closure F. The parts can all be removed and separated for repairs or other purposes, simply by bending the head F backward which gives access to the interior of the case.

It will be observed that the yoke is entirely inclosed within the case and engages the fixed head thereof, and that the journal D also is inclosed within the case, and furthermore, that they operate within the case, said parts thereby being entirely protected at all times. It will be further observed that by the construction and arrangement of parts shown and described, the lateral thrust of the door against the roller will be taken up by the yoke slid-

ing in and engaging the interior of the case, the roller thereby being kept from striking the case, which would cause it to turn with more friction and less freedom than is desirable.

5 Having now described my invention, what I claim is—

10 The herein-described fastener, consisting of a case, made of sheet-metal, and having a plane inner surface, said case having integral with its forward end an outwardly-extending flange, G, and a head, F', said head having an opening, the rear end of said case being bent inward toward the center to form a closure or
15 head therefor, which closure or head may be bent outward to give access to the interior of

the case; a longitudinally-movable yoke, entirely inclosed within said case, said yoke engaging the inner-side of said head F' at its forward end and having notches in said end; 20 a roller, the forward end of which projects through the opening in said head F', said roller having its journal located within said case and received by the notches in said yoke; and a spring pressing against the inner-side 25 of said yoke, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRED W. TOBEY.

Witnesses:

LOIS MOULTON,

LUTHER V. MOULTON.