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O. KUBATZKY

2,518,992

COMBINED LATCH AND CONNECTOR

Filed Sept. 30, 1946

FIG. 1.

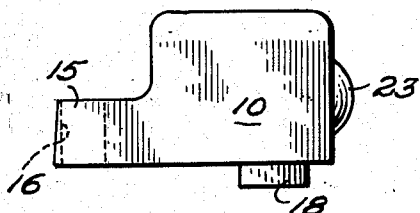


FIG. 2.

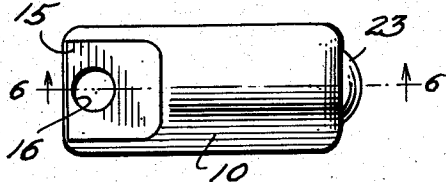


FIG. 3.

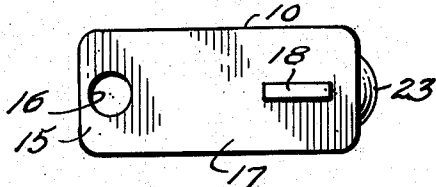


FIG. 4.

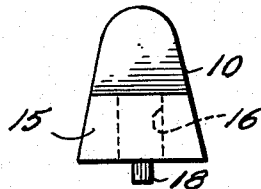


FIG. 5.

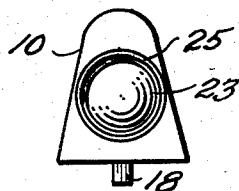


FIG. 6.

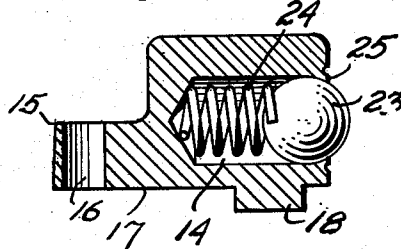


FIG. 8.

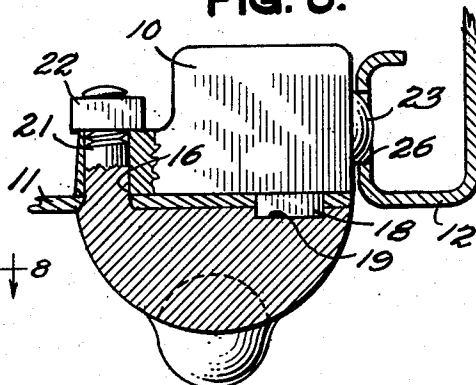
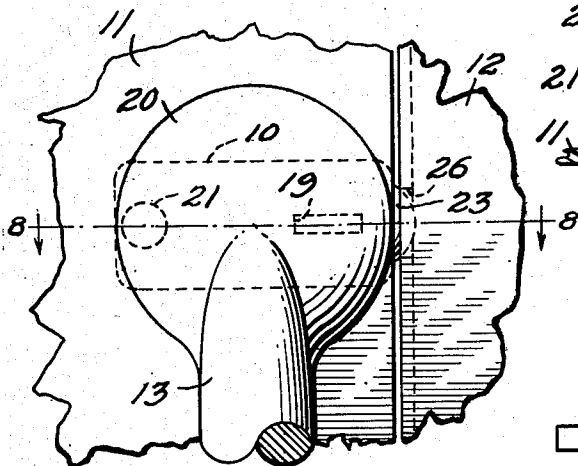


FIG. 7.



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2,518,992

COMBINED LATCH AND CONNECTOR

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Application September 30, 1946, Serial No. 700,309

2 Claims. (Cl. 292—75)

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This invention relates to fasteners and more particularly to a combined latch and connector susceptible of various uses, such as to yieldably retain a door in a closed position or yieldably hold a plate or other device in any of several predetermined positions, and to also retain a plurality of elements in fixed relation one to another, such as a handle to a door, or the flanges of an assembly in fixed relation.

The principal object of the invention is to provide a device of this character which is inexpensive to manufacture, sturdy, easily installed and compact, avoiding the use of a plurality of screws, bolts, rivets or the like for the purpose of securing the latch in place and fixedly connecting two elements together.

A practical use for the combined latch and connector is fully illustrated in my copending application for patent, for a window or wall ventilator filed September 30, 1946, Serial No. 700,308, where the device is used to yieldably retain the swinging end shield of a pivoted air deflecting or ventilating shield in any one of many adjusted positions, and to also fixedly secure an architrave of the window to its frame.

Another practical use for the device is shown in the accompanying drawing, forming a part of this specification, wherein the device is associated with the door of a metal cabinet, to yieldably retain the door in a closed position with respect to its jamb or architrave, and to also fixedly secure a handle to the door.

In the drawing:

Fig. 1 is a plan view of the combined latch and connector.

Fig. 2 is a view in elevation of one side thereof.

Fig. 3 is a view in elevation of the other side particularly adapted for abutting relation with the element to which the device is secured.

Fig. 4 is a view in elevation of one end of the device.

Fig. 5 is a view in elevation of the other end and more particularly the end from which the bolt of the latch projects.

Fig. 6 is a view partly in longitudinal section and partly in elevation on the line 6—6 of Fig. 2.

Fig. 7 is a fragmentary view in elevation showing a portion of a door, a portion of a jamb or architrave of a cabinet or the like, and a portion of a handle secured to the door by use of a combined latch and connector of the character disclosed herein, the latter being shown mainly by dotted lines.

Fig. 8 is a view partly in section and partly in plan, on substantially the line 8—8 of Fig. 7.

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Referring to the drawings, in general the combined latch and connector in accordance with my invention comprises a latch structure casing 10, preferably an integral casting adapted to be secured to a closure member. As fragmentarily shown in Figs. 7 and 8 for example, it may be employed in connection with a first member 11 in juxtaposed relation to the casing, such as a cabinet door for cooperation with the cabinet door frame 12 and function as a connector element for securing a second member 13 in juxtaposed relation to the first member, such as the door handle in its proper position on the door.

The latch structure casing 10 as illustrated comprises an elongated casting having a longitudinal bolt housing bore 14 extending inwardly from its front end and its rear end 15 reduced and provided with a bolt, or rivet or like hole 16 extending therethrough.

The base 17 of the casting is flat for engagement with a casing or other structure except for lug projection 18 which extends sufficiently to project into two or more overlying aligning apertures, for example in the first member 11 such as a sheet metal door and an aperture or depression 19 in the second member 13, such as in the base 20 of a door handle as shown in Figs. 7 and 8. In this arrangement in place of an individual bolt, screw rivet or the like for securing the latch and connector in place, the handle base 20 is provided with an integral lug 21 constituting a threaded fastening means for extending through the bolt hole 16 of casing 10, this lug being threaded at its outer end for receiving a nut 22. Thus the casing structure 10 is secured in place by means of a single fastening element, a bolt or the like, such as lug 21 and nut 22 and this fastening and the lug 18 on the casing function to secure both the connector and latch casing and the member 13 in predetermined relationship with respect to the member 11 or like structure such as heretofore referred to in my copending application.

The latch structure comprises a reciprocating bolt 23 in the form of a ball with a compression spring 24 in the bolt housing bore 14 of casing 10. These elements are secured against withdrawal from the bolt bore by means of a circumferential crimping 25 of the casing structure immediately surrounding the outer end of bore 14 sufficient to slightly reduce the opening of the bore to prevent the removal of the bolt ball 23 and also provide a seat therefor when it is in its normal fully projected position.

Thus the bolt ball 23 is yieldingly projected

outward from the latch and connector casing 10 for engagement with an aperture 26 in door frame 12 or a selected aperture of a series of apertures in the manner shown in my said copending application.

It is obvious that the combined latch and connector in accordance with my invention has many advantages, one of primary importance being the arrangement for the dual locking of the latch to its mounting and other elements to be locked thereby in a definite relationship by means of the projecting casing lug 18 and a single fastening element, a screw threaded bolt or lug 21 and nut 22.

Having described a preferred and practical form of combined latch and connector in accordance with my invention it is obvious that in form it is subject to various changes within the scope of my invention as defined in the following claims.

I claim:

1. The combination of a latch and first and second members in juxtaposed relation thereto and to each other, said first and second juxtaposed members provided with aligning apertures, said latch including a latch casing with a projectable latch therein, and a flat base with an extension from an end thereof having a hole therethrough, a lug projecting from the casing base extending into said apertures in both of said juxtaposed members and fixing the position of the latch casing and said juxtaposed members with respect to each other, and threaded fastening means extending through the hole in the casing base extension and cooperating with said first and second juxtaposed members for securing the latch

and said members in the position determined by said lug on the base of the latch casing.

2. A combined latch and connector comprising a latch structure consisting of a latch casing open at its forward end for a projectable latch member therein and a flat base, said casing being provided with an extension at one end thereof; said extension having a securing element hole therein, a lug extending from said latch casing base adjacent to one end thereof and adapted to extend through a corresponding hole in at least one layer of sheet material, a base element, said sheet material being interposed between said base and said base element, and said base element having a securing member extending therefrom and through the sheet material and said securing element hole in said extension of the casing, and said base element having an opening therein into which the lug on the base extends, whereby the latch structure and securing member of said base element coact to secure the sheet material with respect to the latch structure.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
967,858	Taylor	Aug. 16, 1910
1,069,932	Dupart	Aug. 12, 1913
1,377,051	Augenbraun	May 3, 1921
1,423,825	Anderson	July 25, 1922
1,533,343	Segal	Apr. 14, 1925