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Pales 12. 29,1869.

Fig. 1

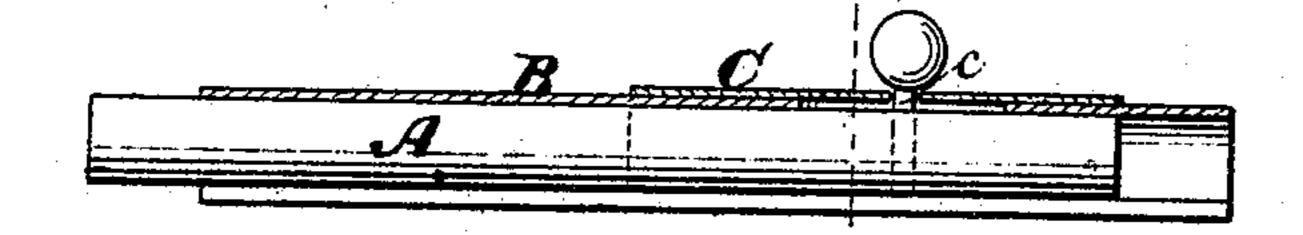
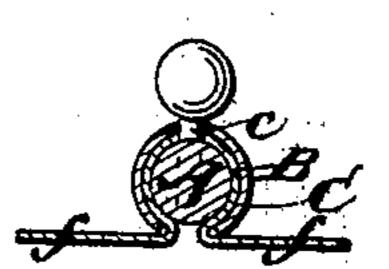


Fig. 2.



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Inverveor

Almon F. Morren

Anited States Patent Office.

ALMON F. WARREN, OF BROOKLYN, NEW YORK.

Letters Patent No. 92,130, dated June 29, 1869.

IMPROVEMENT IN DOOR-BOLTS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Almon F. Warren, of Brooklyn, in the county of Kings, and State of New York, have invented a new and useful Improvement in Bolts for Doors, Windows, Shutters, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a longitudinal section of a bolt constructed according to my improvement, and

Figure 2, a transverse section of the same.

Similar letters of reference indicate corresponding

parts in both figures.

This improved bolt is especially designed for use upon the doors of state-rooms of steamboats, and other doors liable to a shaking or jarring action, but is also applicable to other doors, as well as to shutters and windows.

The object of the invention is to obviate the rattling of the bolt in its socket, and otherwise to provide a neater and better bolt than is now used for said pur-

pose.

The invention consists in the combination, with the tubular socket of a sliding bolt, of an elastic sleeve, which always fits snugly to the exterior of the socket, and so prevents the bolt from rattling.

To enable others to make and use my invention, I will proceed to describe it, with reference to the drawings.

A is a cylindrical bolt of the ordinary construction,

fitted to slide within a tubular socket, B.

Said tubular socket B is constructed of sheet-metal, preferably of one piece, but may be constructed in other ways.

When thus constructed of one piece of sheet-metal, said piece is curved or bent longitudinally down its centre into a tubular form, or nearly so, and its outer

portions or edges bent or doubled back, so as to form flanges ff, for fitting against a flat surface, and of sufficient breadth for reception of screws, thereby forming a tubular socket, whose transverse sectional form is shown at fig. 2.

C is an elastic sleeve, constructed also of sheetmetal, and fitted to slide over the socket longitudinally, and is connected, through the socket, to the bolt A, by means of the shank of the knob, which passes through a slot cut lengthwise of the socket, and is screwed or otherwise secured in the bolt, so that by the sliding of the sleeve over the socket and the shank of the knob within the slot, longitudinal movement is imparted to said bolt.

Said sleeve does not form a complete circle in its transverse section, as may be seen by reference to fig. 2, but is left open at its under side, so as to allow for its being passed over the tubular portion of the socket, and before it is placed upon the socket, it is slightly smaller than is required for an exact fit, so that after having been forced thereon by expansion, it will clasp or hug the said tubular portion of the socket, thereby preventing all rattling of the parts.

It is preferred to have the elastic sleeve C of sufficient length to cover the longitudinal slot in the socket, whether the bolt A be pushed in or out, so as to exclude dust and other foreign matter from the in-

terior of the socket.

What I claim as my invention, and desire to have

secured by Letters Patent, is—

The elastic sleeve C, in combination with the bolt and the tubular socket B, substantially as and for the purposes herein set forth.

ALMON F. WARREN.

Witnesses:

FRED. HAYNES, J. M. DIXON.