

R. I. STUBBS.
PRESSER DEVICE.
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1,383,582.

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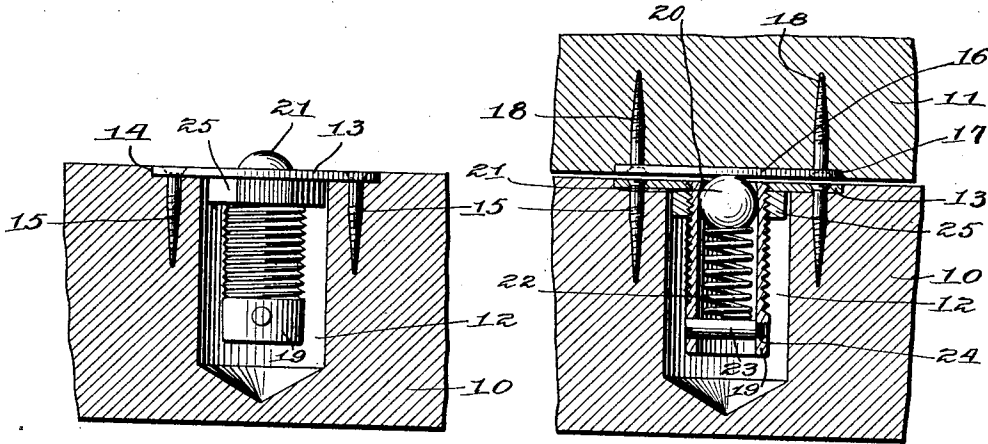


Fig. 1.

Fig. 2.

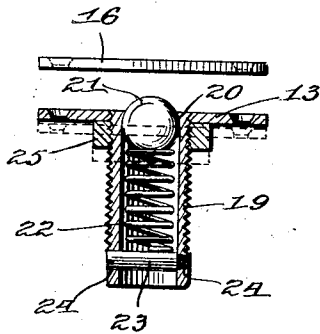


Fig. 3.

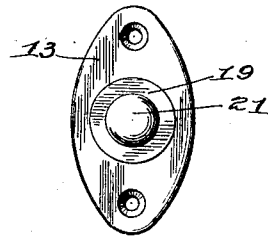


Fig. 4.

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RUPERT I. STUBBS, OF DELTA, PENNSYLVANIA.

PRESSER DEVICE.

1,383,582.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RUPERT I. STUBBS, a citizen of the United States, residing at Delta, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Presser Devices, of which the following is a specification.

This invention relates to a presser device, and the particular adaptation which I have selected for the purpose of illustration is its embodiment in an anti-rattling device for automobile doors.

Closures of many types, which are intended to fit into jambs or frames, as for instance the door of an automobile, are liable to sag after extended use, and the hinges upon which such closures are mounted wear, so that a close fit of the parts is destroyed, and the closure will tend to have a certain freedom of movement resulting in a jarring, rattling and noise producing movement of the parts with relation to each other. This is particularly objectionable in the doors of automobiles, which are subjected to the shocking or jarring produced by the movement of the vehicle in its travel.

The object of the invention is to provide a closure or similar element with a presser member or device which will take up such free movement due to the wearing of the parts. A further object of the invention is to provide such a member, wherein the working parts will be concealed from view. Another object of the invention is the provision of an adjustable device of this type, resulting in a wide range of effectiveness and capable of taking up more and more movement as the parts wear. A still further object of the invention is the avoidance of projecting parts in such a device as will cause the clothing of a passenger to be caught in the presser device. Another object of the invention is to provide a presser device which will be neat in appearance, and one in which the adjustment of the parts may be accomplished without varying the spring pressure upon the movable presser element.

Other objects and advantages of the invention will hereinafter appear in the following description and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, in which like parts are represented by the same reference characters,

Figure 1 is a side elevation of the presser device, as it is mounted within the framework, the framework being shown in section,

Fig. 2 is a sectional view of the presser device, the closure and the framework, showing the device in its operative position,

Fig. 3 is a sectional view of the parts of the presser member removed from the socket, in which it is ordinarily mounted, this figure showing the wear plate, which is generally used with the presser device, and

Fig. 4 is a face view of the presser device in its inoperative position.

Referring to the drawings, the numerals 10 and 11 indicate two portions of structural members, and for the purpose of illustration 11 will be said to indicate the door of an automobile and 10 the framework in which the door is mounted, although it will be apparent that a reversal of these parts will be just as effective, and the presser device may as well be mounted within the door as the framework thereof.

12 is a socket or bore provided in the framework 10, in which the presser device is mounted by means of the plate 13 seated in the countersink 14 and secured therein by means of the screws 15, 15. There is a wear plate 16 mounted upon the door 11, which is likewise placed in a countersink 17 by means of screws 18, 18.

The presser device comprises a cylinder or barrel 19, which has a uniform diameter throughout its length except at one end, of which the inner edge is enlarged, as shown at 20, to provide an interior annular shoulder. Within this barrel is contained a movable presser element 21, which in the present instance is shown as a sphere, although it will be readily understood that this presser element may have other shapes or forms. In the barrel there is also a spring 22, which is designed to bear upon the movable presser element to hold it in the mouth of the barrel. An opposed bearing point for the spring 22 is provided in the pin or screw 23, which straddles the barrel and rests in the alined openings 24, 24, in the lower portion thereof.

The barrel is provided with screw threads upon its exterior, which extend for a major portion of its length. Mounted upon the exterior of the barrel are the securing plate 13 and a lock nut 25, both of which are provided with interior screw threads.

It will be seen that by the construction

just set forth the plate 13 is capable of a movement upon the barrel so that the barrel might be caused to project beyond the plate to a greater or less degree, and the purpose
 5 of the washer 25 is to secure in fixed relationship the barrel and securing plate. In Fig. 3 this fixed position of parts is shown in full lines with the upper edge of the barrel flush with the outer face of the securing
 10 plate. In this same figure in dotted lines the securing plate and lock washer are shown in a somewhat different fixed position, in which the barrel will project slightly beyond the face of the securing plate.

15 In Fig. 2 the movable presser element is shown as depressed by the door, and it will be noted that there is but slight movement of this movable presser element to secure the desired results. The spring 22 is quite
 20 strong and the pressure exerted thereby is sufficient to correct the looseness or freedom of movement of the door with respect to its framework. It will also be noted that the relationship of barrel, movable presser ele-
 25 ment and spring might be said to be constant, that is, it is not affected by any adjustment of the securing plate upon the barrel.

In assembling the parts the ball 21 is
 30 placed within the barrel 19 and the spring placed thereon. The pin 23 is then passed through the openings 24, 24, behind the spring. In view of the strength of this spring, it may be that a special tool will be
 35 required to accomplish the insertion of the pin in the openings. When once inserted, however, the spring will maintain the pin in proper position. The lock washer 25 is then screwed upon the barrel, after which
 40 the securing plate is likewise mounted upon the barrel. When the face of the securing plate is flush with the end of the barrel, the lock washer is screwed toward the same and brought into firm contact with the securing
 45 plate, which will effect a fixed position of the barrel and the securing plate. This is the relative position of the parts desirable in a door and frame which is new.

When the door becomes loose from any
 50 cause and the normal space between the door and its frame is increased, the position of the barrel and the securing plate must be changed to cause the barrel to project beyond the securing plate to compensate for
 55 the increased distance between the closure and its frame. This is accomplished by removing the parts from the socket in the framework, releasing the lock washer and changing the relative position of the secur-
 60 ing plate on the barrel, and then locking the parts in this new adjustment by advancing the lock washer into contact with the securing plate. The assemblage may then be re-
 placed in the socket by the screws 14, 14.

65 It will be understood that the device is

capable of use in many places, and that the door of an automobile may be provided with a plurality of them to avoid any liability for rattling in any direction. The device is not limited in its use to a closure which is
 70 hingedly mounted, but may as well be used with those which have a sliding fit in its frame.

In the use of the device the wear plate 16 is usually employed to avoid the wearing
 75 action of the sphere 21 upon the parts of the framework, with which it comes into contact.

While I have shown and described my preferred form of the invention, it will be
 80 understood that there are other embodiments thereof and that I do not deem myself limited to any single embodiment of the invention save as is required by the appended
 85 claims.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a presser device, a barrel, a spring-pressed movable presser element in said bar-
 90 rel, a plate movably secured to said barrel, and means for securing said plate in a fixed position to said barrel.

2. In a presser device, a barrel, a resiliently mounted presser element projecting
 95 from said barrel, means for securing said barrel upon a framework, and means for varying the relative position of said securing means and said barrel.

3. In a presser device, a barrel, a resiliently mounted presser element projecting
 100 from said barrel, a plate for securing said barrel upon a framework, and means for adjusting the position of the plate and barrel and for maintaining them in any of said
 105 adjustments.

4. In a presser device, a barrel, a resiliently mounted presser element projecting
 110 from said barrel, a securing plate movably mounted upon the barrel, and means for locking said plate upon said barrel.

5. In a presser device, a barrel provided with exterior screw threads, a resiliently
 115 mounted presser element within the barrel, a securing plate provided with screw threads and adapted to be moved along the barrel, and a nut cooperating with said securing plate and barrel for locking the plate in a
 fixed position to said barrel.

6. In a presser device, a barrel provided
 120 with a restricted mouth at one end, a movable presser element within the barrel projecting through the mouth thereof, means for yieldingly maintaining said presser element in its projected position comprising a
 125 tension member and a securing element therefor at the end of said barrel opposite said restricted mouth, and means for mounting said barrel in a framework so that the presser element may be projected more or
 130

less from the face of said framework without varying the tension of said yielding means.

- 5 7. In a presser device, a barrel provided with a restricted mouth at one end, a spherical presser element within the barrel projecting through said mouth, a spring bearing upon the sphere, and a retaining pin for said spring straddling said barrel.
- 10 8. In a presser device, a barrel provided with a restricted mouth at one end and with

screw threads upon its exterior, a movable presser element within the barrel projecting through the mouth thereof, a spring secured in the barrel and bearing upon said presser 15 element, retaining means for said spring, a securing plate mounted upon said screw threaded exterior of said barrel, and a lock washer for maintaining said barrel and securing plate in a fixed position. 20

In testimony whereof I affix my signature.
RUPERT I. STUBBS.