No. 886,273. PATENTED APR. 28, 1908.

J. J. TANZEY.

SUCTION DEVICE FOR SECURING GLASSES IN PLACE.

APPLICATION FILED DEC. 6, 1906.

Fig. 1.

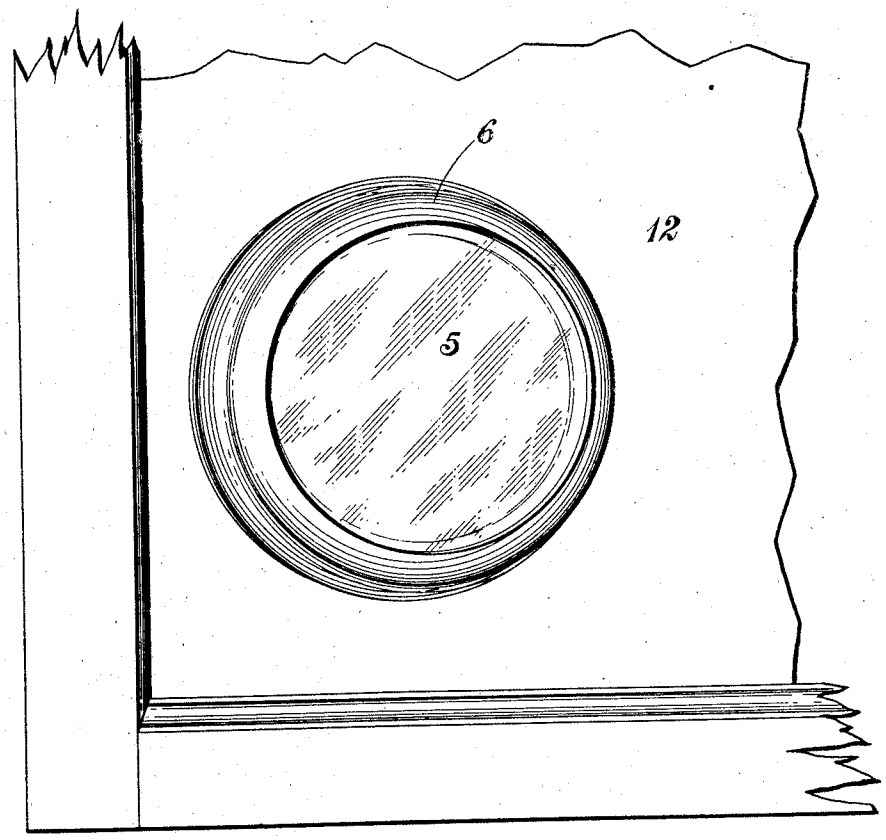
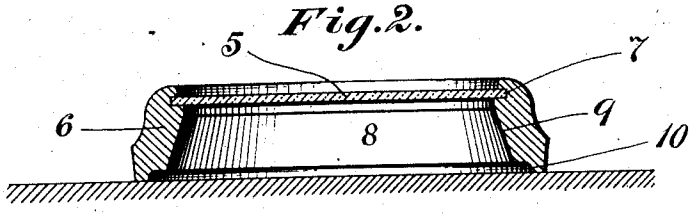


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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SUCTION DEVICE FOR SECURING GLASSES IN PLACE.

No. 886,273. Specification of Letters Patent. Patented April 28, 1908.

Application filed December 6, 1906. Serial No. 346,555.

To all whom it may concern:

Be it known that, I JOHN J. TANZEY, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Suction Devices for Securing Glasses in Place, of which the following is a specification.

This invention relates to devices for causing either the adherence of a transparent glass-plate, or a mirror to any object to which it is desired to apply the same, and primarily is intended to be secured by suction to a window-pane, which on account of the moisture of the inner air deposited thereon is apt to be occluded by a film or covered by frost.

By the use of my invention an air-tight space between two opposing surfaces is provided, so that the hygrometric condition of the atmosphere in a room, car, or other space, will not cause a deposit on the window.

My invention is useful in Pullman cars, or the state-rooms of steamers, and in the cabs of locomotives and street-cars, to enable the engineer or motorman to obtain a clear view of the objects which he is passing. Furthermore, it may be employed as a holder for mirrors for use in shaving, comprising, as it does, a simple suction-device adapted to be held by atmospheric pressure to any smooth surface to which it may be applied.

In the accompanying drawings, Figure 1 is a perspective view of my improvement applied to a window-pane. Fig. 2 is a transverse vertical section of the same.

Referring to the drawings, the numeral 5 designates a glass-plate which may be either a mirror, a lens or other substitute therefor, *e. g.* a transparent glass said glass being of any desired shape, although shown of circular form.

Designated by 6 is a holder or carrier for a glass, mirror, or other device of similar nature, which is preferably constructed of rubber or analogous material for reasons hereinafter stated, and corresponds in shape to that of glass 5. In this carrier is formed a groove 7 in which the plate 5 is fitted at its edge as illustrated in Fig. 2, and below the point where said plate 5 is secured the carrier is formed with a chamber 8, the wall of which is preferably inclined at 9, and has at its lower end a rabbet 10.

When employed as a vision-glass my improved device is readily secured to the pane 12 of a car or other window, and owing to the flexible nature of the frame or carrier 6 by compressing the same the air is exhausted from the chamber 8 thereof, and the atmospheric pressure will cause said carrier to adhere closely to the window-pane or other object upon which it is positioned. In other words the chamber 8 acts as a suction-space and the device is held by atmospheric-pressure to the object to which it is applied after the air has been exhausted from said chamber 8. As will be apparent the device may be readily applied to a window-pane of a Pullman-car, room, or other construction, and will prevent frosting of said window-pane or of the adherence of the moisture of the inner air therero. So too, it is most convenient as a holder for mirrors or looking-glasses, and may be applied by suction to the wall of a room, or other compartment and thus be useful as a shaving glass. In either construction employed it will be seen that an air-tight space is provided, and when employed as a vision-glass the moisture of the inner air will not reach the window, whereby a clear view through the same is assured. Furthermore, when used as a shaving-glass or as a mirror or for other purposes the device will firmly be held in place by atmospheric-pressure, and will thus afford a convenient means for travelers and others in affording a convenient device for various purposes.

My invention is not limited to the form of the carrier, nor to the particular material of which it may be composed, provided said material has the qualifications necessary to enable the structure to be secured in the manner described, and while primarily designed for use as a vision-plate or glass for window-panes, is not necessarily limited to such use.

Having thus described the invention, what I claim is—

1. The combination, with a yieldable car-

rier normally open at both ends, of a plate secured in one open end of said carrier,—the carrier being rabbeted at its other end to aid the same in being secured to an object by suction.

2. A device comprising a yieldable frame having open ends; a plate held in and covering one open end of said frame; and a suction-space within the frame.

3. A device comprising a frame or carrier of rubber, said frame having open ends; a glass plate secured in a groove of one of said open ends; and a suction-space within the frame or carrier, the wall of said frame or carrier being rabbeted at its end opposite the plate.

4. A device consisting of a plate; a rubber frame recessed on one end to engage the edge of said plate; and a suction-space in said rubber-frame for securing the same to an object.

5. A device comprising an annular rubber frame recessed at one end; a plate secured in said recess; a suction-space in said rubber frame; and a groove or recess at the end of said rubber frame opposite the plate.

6. A device of the kind described comprising an open rubber frame recessed at one end to receive a closure, said frame having an inclined inner wall, and a groove or recess at its end opposite the closure.

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

JOHN J. TANZEY.

Witnesses;
F. E. ANDERSON,
FRED H. CARPENTER.