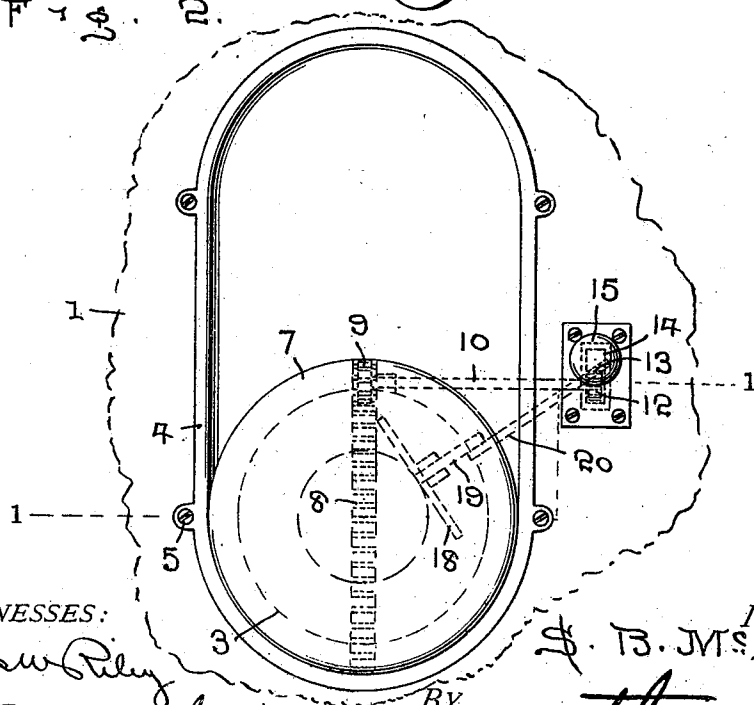
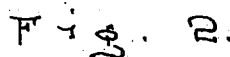


CUSPIDOR.

979,980.

Patented Dec. 27, 1910.



WITNESSES:

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UNITED STATES PATENT OFFICE.

STERLING B. McDONALD, OF GREENWOOD, NEBRASKA.

CUSPIDOR.

979,980.

Specification of Letters Patent.

Patented Dec. 27, 1910.

Application filed March 22, 1910. Serial No. 550,860.

To all whom it may concern:

Be it known that I, STERLING B. McDONALD, a citizen of the United States, residing at Greenwood, in the county of Cass and State of Nebraska, have invented certain new and useful Improvements in Cuspidors; 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.

My invention relates to new and useful improvements in cuspidors and more particularly to that class adapted to be used in trains or railway coaches of any description and my object is to provide a cuspidor and extend the same through the floor of the car.

A further object is to provide a cover for the upper end of the cuspidor.

A further object is to provide means for moving the cover, whereby the same may be disposed over or removed from the cuspidor, and, a further object is to provide means for closing the lower end of the cuspidor coincident to the opening of the upper end thereof, whereby a draft will be prevented through the cuspidor.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a sectional view through the floor of a car showing my improved device attached thereto, the section being taken on line 1—1 of Fig. 2, and, Fig. 2 is a top plan view of the cuspidor and its parts.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the floor of a car through which is formed an opening 2 and through said opening extends my improved cuspidor 3, said cuspidor preferably tapering from its upper to its lower end. The upper end of the cuspidor is provided with a flange 4 which extends over the floor surface 1 and is secured thereto by means of screws or the like 5 and the flange is curved between its outer edge and the edge of the cuspidor to form a way 6 in which is seated the cover 7.

The flange 4 is extended a distance to one side of the cuspidor, thereby providing a surface over which the cover travels when

moved from off the cuspidor and by depressing the flange to form the way 6, the top of the cover is practically flush with the top of the floor of the car.

The cover 7 is moved bodily by securing to the under face thereof a toothed bar 8, with which engages a cog 9 so that when said cog is rotated, the cover will be moved back and forth in the way 6. The cog 9 is attached to one end of a shaft 10, the opposite end of the shaft extending through a socket 11 and that portion of the shaft within the socket has attached thereto a pinion 12 which meshes with teeth 13 on a push rod 14 and as said push rod is raised or lowered, the shaft 10 and parts attached thereto are rotated.

The push rod 14 extends vertically through the socket 11 and is provided with a head 15 at its upper end so that pressure may be readily applied to the push rod to lower the same and in order to return the push rod to its upward position after being depressed, the lower portion thereof is surrounded by a spring 16, the lower end of which is attached to the push rod, while the upper end thereof is secured to the lower end of the socket through which the push rod extends.

When it is desired to expectorate, pressure is applied to the push rod, which will result in rotating the cog 9 and moving the cover laterally from over the cuspidor and to guard against air entering the car through the lower end of the cuspidor, I have provided means for closing said lower end coincident to opening the upper end, which result is accomplished by hingedly securing between ears 17 at the lower end of the cuspidor a closure plate 18.

The shank 19 to which the closure plate is attached is substantially L shaped and has its outer ends connected to the lower end of the push rod 14 by means of a link 20 so that when the push rod is depressed to remove the cover 7, the closure plate 18 will be swung upwardly and disposed over the lower end of the cuspidor.

As soon as pressure is released from the push rod 14, the spring 16 together with the weight of the closure plate 18 will move the push rod 14 upwardly and again dispose the cover 7 over the upper end of the cuspidor, thus closing access thereto.

My improved cuspidor may be placed at any suitable point in the floor of the car and the push rod may be placed in con-

venient reach of anyone occupying the seat, thus entirely dispensing with the usual form of cuspidor now commonly in use.

It will further be seen that as soon as
5 downward pressure is released from the push rod, the spring will automatically return the cover to position over the cuspidor and completely obscure the same from view and it will likewise be seen that the lower end of
10 the cuspidor will be covered as the upper end thereof is uncovered, thus excluding any draft through the cuspidor.

What I claim is:—

1. In a cuspidor, a receptacle adapted to
15 be seated with its upper surface flush with the floor, a cover slidably mounted above the receptacle, a rack on the under surface of said cover, a pinion meshing with the rack and secured to a shaft extending without the receptacle and under the floor, a second pinion
20 secured on the outer end of said shaft, a push button having its stem slidably secured to the floor, a rack formed on one side of said stem and adapted to engage said last mentioned pinion, a bottom pivotally mounted
25 on the receptacle, a link connecting the bottom with the stem of the push button, and means for normally holding said push button in a fixed position.

2. The combination with a floor having an opening therethrough, of a cuspidor extending through said opening, said cuspidor having a flange surrounding its upper end and extending laterally therefrom, said flange
35 having a depressed portion to form a way, a closure movably mounted in said way, a toothed bar attached to said cover, a cog meshing with said toothed bar, a shaft carrying said cog, a pinion mounted upon the op-
40 posite end of the shaft and a push rod hav-

ing teeth thereon meshing with said pinion, whereby when the push rod is lowered, the shaft will be rotated and the cover moved from over the cuspidor.

3. A device of the class described, comprising the combination with a floor having
45 an opening therethrough, of a cuspidor extending through said opening, a cover for the upper end of the cuspidor, a toothed bar attached to the cover, a cog meshing with
50 said bar, a shaft carrying said cog, a pinion on said shaft, a push rod having teeth thereon meshing with the pinion and means to automatically raise said push rod after the same has been depressed and released. 55

4. A cuspidor comprising the combination with a floor section having an opening there-
through, of a cuspidor seated in said opening, said cuspidor being open at both ends, a
60 cover for the upper end of the cuspidor, a toothed bar attached to said cover, a cog meshing with said bar, a shaft to which said cog is secured, a pinion on the opposite end
65 of said shaft, a push rod having teeth thereon adapted to mesh with said pinion, a socket in which said push rod is movably mounted, a closure plate for the lower end of the cuspidor, connecting means between said plate and push rod adapted to close the plate when
70 the push rod is lowered and a spring adapted to move said push rod upwardly after it has been depressed and released.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

STERLING B. McDONALD.

Witnesses:

A. D. WELTON,
L. H. DAFT.