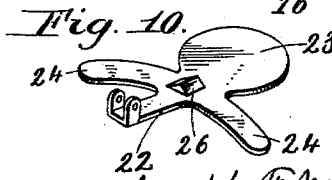
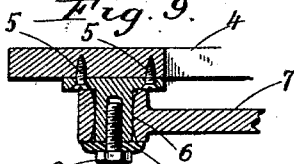
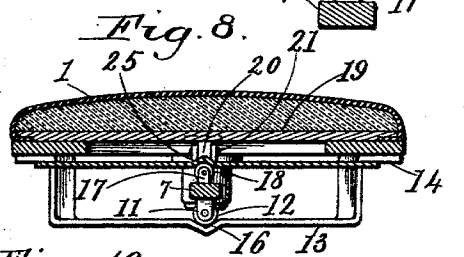
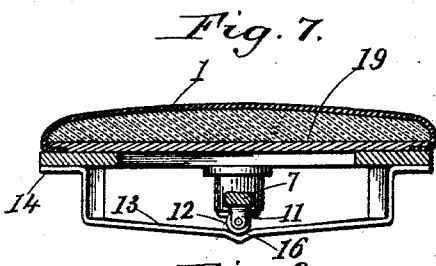
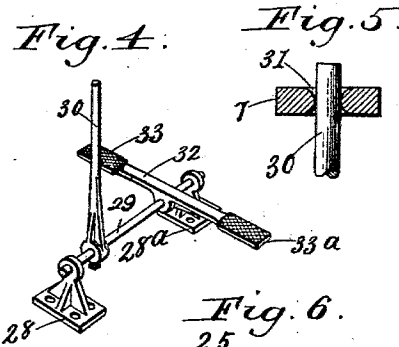
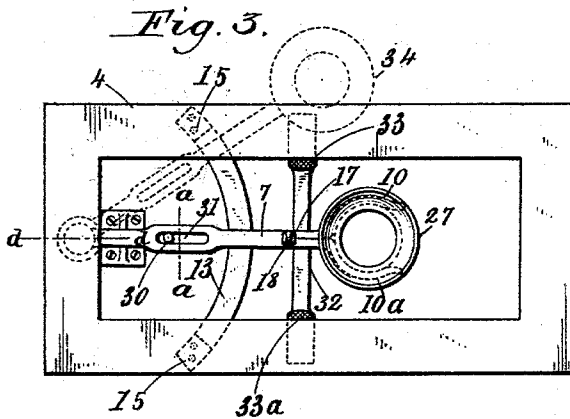
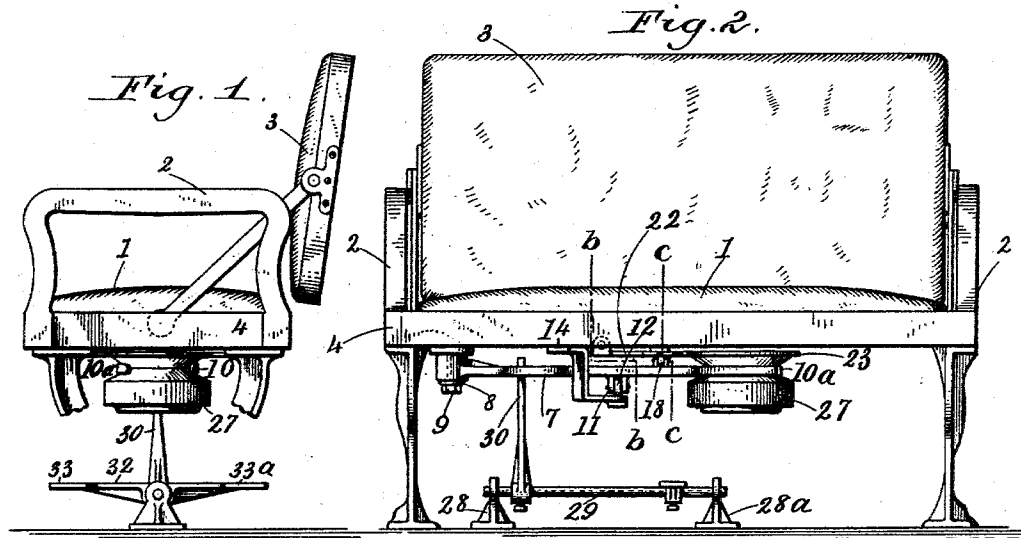


(No Model.)

J. F. MILLER.
CAR CUSPIDOR.

No. 561,681.

Patented June 9, 1896.



Witnesses,
Emil Heubart.
L. M. Spong.

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By James S. Angster Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH F. MILLER, OF NORTH TONAWANDA, NEW YORK, ASSIGNOR OF
ONE-THIRD TO EMORY H. BRECKON, OF SAME PLACE.

CAR-CUSPIDOR.

SPECIFICATION forming part of Letters Patent No. 561,681, dated June 9, 1896.

Application filed March 20, 1896. Serial No. 584,107. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. MILLER, a subject of the Queen of Great Britain, residing at North Tonawanda, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Car-Cuspidors, of which the following is a specification.

My invention relates to an improved device for operating a car-cuspidor, and will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 represents a side elevation, the supporting-legs being broken away to show the mechanism beyond it. Fig. 2 is a front elevation showing the cuspidor in its normal position under the seat. Fig. 3 represents a top plan view, the seat and cushion being removed, showing the several parts in their normal position and the outward position of the cuspidor by dotted lines. Fig. 4 is a perspective view showing the double treadle mounted on a shaft in its supporting-frame, showing also the arm that operates the pivoted arm carrying the cuspidor. Fig. 5 represents an enlarged vertical cross-section through the arm carrying the cuspidor, showing a cross-section through the opening through it on or about line *a a*, Fig. 3. Fig. 6 is a transverse section through the arm carrying the cuspidor, cutting also through a portion of the cuspidor-cover arm on or about line *c c*, Fig. 2. Fig. 7 is a transverse section through the seat and cuspidor-arm on or about line *b b*, Fig. 2. Fig. 8 represents a transverse section on or about line *c c*, Fig. 2, cutting through the seat, the cuspidor-cover arm, and through the cuspidor-supporting arm. Fig. 9 represents a vertical section on or about line *d d*, Fig. 3, cutting through the cuspidor-supporting-arm pivotal joint. Fig. 10 is a perspective top view of the cuspidor-cover arm.

Referring to said drawings in detail, the car-seat 1, its arms 2, pivoted reversible back 3, and cushion-supporting frame 4 are of the usual and well-known construction. To the under side of the seat-frame 4 is rigidly secured, by screws 5, a depending pivotal pin 6. To this pin 6 is secured the cuspidor-sup-

porting arm 7 by means of a washer 8 and screw-bolt 9. (See Figs. 2 and 9.) It will be noticed by reference to Fig. 9 that the hole through the cuspidor-arm is enlarged from the center outward to each side, which construction allows, in addition to its horizontal swinging movement, a slight vertical swinging movement to be given to the forward portion of said arm on its pivotal pin 6, the object of which will appear farther on.

At the forward end of the arm 7 is a spring-forked portion 10 and 10^a, (shown by dotted lines in Fig. 3,) Fig. 1 showing the two ends of the fork, and a side elevation in Fig. 2. These fork portions are adapted to fit the neck of a cuspidor, the cuspidor being forced in between the forks, which are forced apart as the cuspidor passes in, and which then spring together with sufficient force to hold it in place and from which it can be easily removed, the elasticity of the spring-forks allowing it to be pulled out.

The underside of the arm 7 is provided with two ears 11, (see Figs. 2, 7, and 8,) between which is pivotally secured a roller 12. Below the arm 7 is a curved transverse bar 13, having its ends extended upward and provided with flanged portions 14, by which the bar is secured to the under side of the seat by screws 15. (Shown by dotted lines in Fig. 3.) In or about the center of this bar is a depression 16, in which the roller 12 drops when the arm 7, carrying the cuspidor, is in its normal position under the seat, the construction being such that the roller 12, supporting the cuspidor, travels back and forth on the curved bar 13 and drops into the depression 16, when it is substantially in a central position under the seat and is thereby secured in that position until required for use.

On the top of the cuspidor-arm 7 are two upwardly-extending ears 17, (see Figs. 2, 3, and 8,) between which is mounted on a short shaft a friction-roller 18, the office of which is to lift the cover up from the cuspidor.

To the under side of the bottom board 19 of the seat is rigidly secured by screws a downward-extending lug 20, (see Fig. 8,) to which is pivoted by a pin 21 an arm 22, carrying the cuspidor-cover 23. Each side of the arm 22 has a curved extension 24. (Shown in the per-

spective view, Fig. 10.) The arm is also provided with a depression 25 on its under side. (See Figs. 6 and 8. See, also, where the upward-extending portion 26, having the depression 25 on its under side, is shown.)

The arm 22, it will be noticed, cannot swing horizontally, but is adapted to swing on its pivotal connection slightly up or down, so that the cover 23 may be lifted slightly above the cuspidor 27 or let down thereon.

To the floor is secured two small supporting-frames 28 28^a, in which is mounted a shaft 29, on which is rigidly secured an upward-extending arm 30, the upper end of which extends up through a long narrow opening 31 in the arm 7. (See Figs. 2 and 3.) A treadle 32 is also rigidly secured to the shaft 29. It is provided with two foot-pieces 33 and 33^a.

From the above-described construction it will be seen that when the foot-piece 33, for instance, is pressed downward the cuspidor-arm and cuspidor will be moved outward in the direction of the dotted lines 34 in Fig. 3, and a pressure down upon the other foot-piece, 33^a, will reverse the movement and bring the cuspidor out from the opposite side of the seat, or it can be moved far enough to let the roller 12 rest in the depression 16, and thereby keep the cuspidor under the seat until required for use. The preferred form of the curved bar 13 is to have it incline slightly upward from each side of the center depression 16, substantially as shown in Fig. 7, so that when the treadle is released the weight of the arm and cuspidor, which is supported by the roller 12, will cause the arm 7 to move to its normal position by gravity.

At the above movement of the cuspidor outward the roller 18 passes out of the depression 25 and thereby lifts the cover 23 up off from the cuspidor and drops it thereon every time it moves back to its normal position. The roller 18, pressing under one or the other of the arms 24, according to the direction in which it is moved, supports the cover in its upward position while the cuspidor is out of its normal position.

I claim as my invention—

1. In a cuspidor for cars, the combination

of an arm carrying a cuspidor, pivoted to the under side of the seat so as to be capable of swinging horizontally on its pivotal pin and also of a slight vertical movement at the end carrying the cuspidor, a roller pivoted to the under side of the cuspidor-arm, a curved plate secured to the under side of the seat and inclining downward both ways to the center thereof upon which the cuspidor-arm roller travels, a treadle-shaft mounted in suitable bearings, an arm rigidly secured to said shaft having its upper end in engagement with the cuspidor-arm, and a treadle also secured to the shaft for operating it and moving the cuspidor under or out from under the seat, substantially as described.

2. In a cuspidor for cars, a cuspidor-arm pivoted at one end to the under side of the seat so as to be capable of a horizontal swinging movement on its pivotal pin, a spring-forked portion at the end of said arm adapted to receive a cuspidor between the spring-forks, a roller pivoted to the under side of said arm and a curved plate provided with a V-shaped depression and secured to the under side of the seat upon which the cuspidor-arm roller travels downward to the center, and a double-ended treadle and arm connected with the cuspidor-arm for moving the cuspidor under the seat or out, substantially as described.

3. In a cuspidor for cars, a pivoted cuspidor-arm carrying a cuspidor at its free end and adapted to be turned horizontally on its pivotal pin under the seat of a car or out therefrom, in combination with an arm pivoted at one end to the under side of the seat so as to swing vertically on its pivot and having at its free end a cuspidor-cover capable of a vertical movement with the arm, means on the cuspidor-arm for lifting said cover, a treadle and means connecting with the cuspidor-arm for moving it under the seat or out therefrom and operating the cuspidor-cover substantially as described.

JOSEPH F. MILLER.

Witnesses:

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L. M. SPONG.