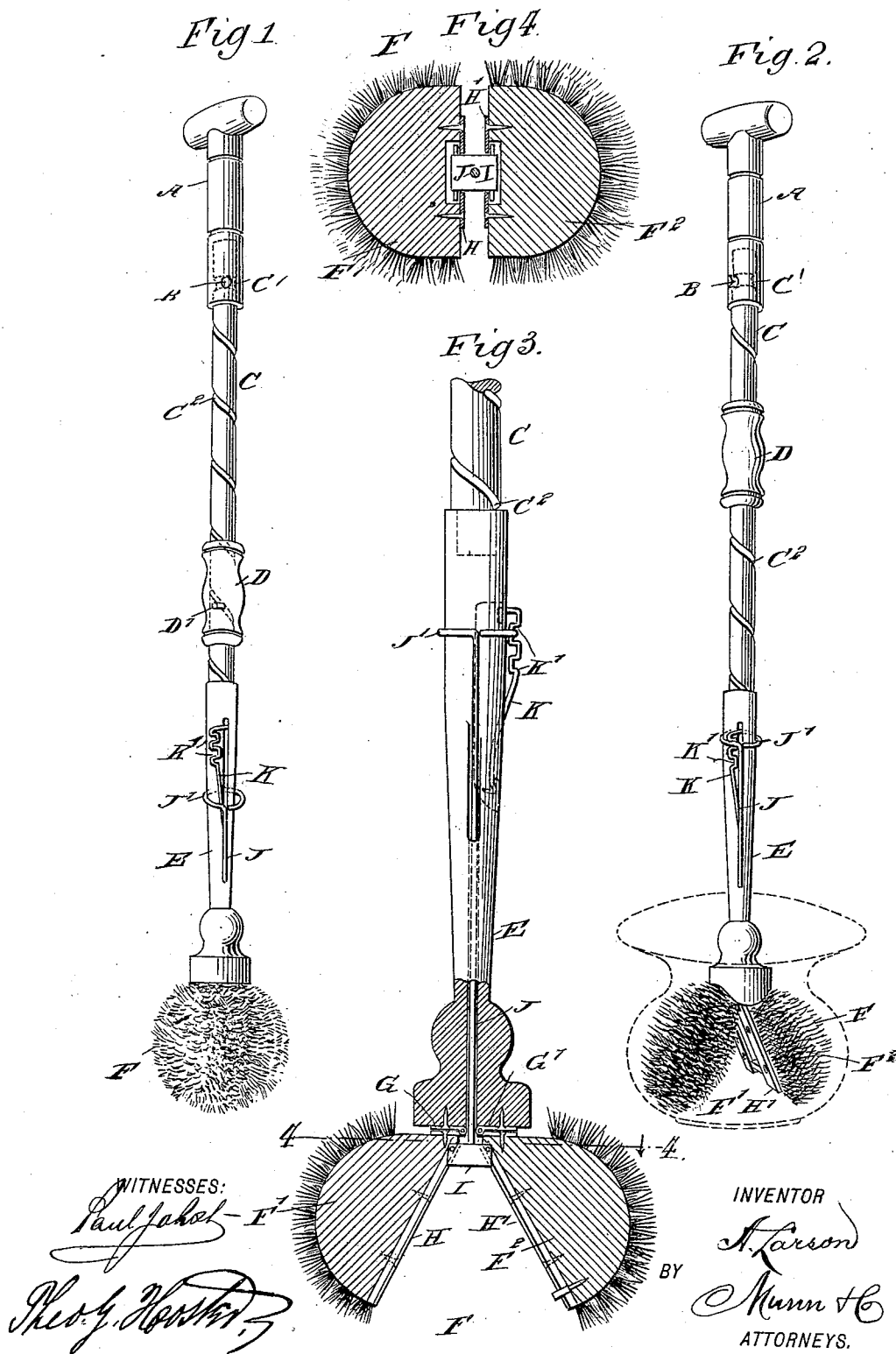


(No Model.)

A. LARSON.
CUSPIDOR CLEANER.

No. 546,893.

Patented Sept. 24, 1895.



UNITED STATES PATENT OFFICE.

ALFRID LARSON, OF WAUSAU, WISCONSIN.

CUSPIDOR-CLEANER.

SPECIFICATION forming part of Letters Patent No. 546,893, dated September 24, 1895.

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To all whom it may concern:

Be it known that I, ALFRID LARSON, of Wausau, in the county of Marathon and State of Wisconsin, have invented a new and improved Cuspidor-Cleaner, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved cuspidor-cleaner which is simple and durable in construction, can be readily applied, and arranged to be opened and rotated after insertion into the cuspidor to clean the walls thereof.

The invention consists principally of a two-part spherical brush, a shaft for carrying the brush, and means for opening the two parts of the brush.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement with the brush in a closed position. Fig. 2 is a similar view of the same with the brush open. Fig. 3 is an enlarged sectional side elevation of the improvement, and Fig. 4 is a sectional plan view of the same on the line 4 4 of Fig. 3.

The improved cleaner is provided with a handle A, adapted to be taken hold of by the operator, the said handle forming in its lower portion a bearing for the upper end of the shaft C, provided within the handle A with an annular groove C', into which projects a pin or set-screw B, secured in the said handle A. By this arrangement the shaft C is permitted to turn in the handle, and at the same time the handle and shaft are connected with each other.

In the shaft C is formed a spiral groove C², engaged by a pin D' formed in the sleeve-handle D, adapted to be taken hold of by the operator to permit the latter to move it up and down on the shaft C to cause the latter to rotate by the pin D' engaging the spiral groove C². On the lower end of the shaft C is secured a head E for a spherically-shaped brush F, made in two parts F' and F², connected by hinges G and G', respectively, with the under

side of the head E. On the inner faces of the two parts F' and F² of the brush are arranged the guideways H and H', engaged by a block I, which when moved up and down causes an opening and closing of the two brush parts F' and F², as will be readily understood by reference to the drawings.

When the block I is in a lowermost position, then the brush is closed, as illustrated in Fig. 1, and when the block I is drawn upward into the position shown in Fig. 3, then the brush parts F' and F² are opened out, as indicated in Figs. 2 and 3. The block I is secured on the lower end of a rod J, extending upward through an aperture in the head E, the aperture being located centrally in the lower portion of the head, to then extend to one side thereof, so that the upper part of the rod J passes to the outside of the head, as is plainly shown in Figs. 1, 2, and 3.

The upper outer end of the rod J is formed with a ring or band J', adapted to pass over and engage one of a series of notches K', formed in a spring-catch K, held on the head E and similar to the springs used in umbrella-sticks. When the spring-catch K is pressed inward and the rod J is pushed downward, the brush parts F' and F² are in a closed position; but when the operator takes hold of the ring J' and pulls the latter upward, the block I is drawn up on the guides H H', so that the brush parts F' and F² are opened. When the block I passes into an uppermost position, the ring or band J' passes over the upper end of the spring-catch K, so that the latter swings outward and locks the ring J' in position so as to hold the brush parts F' and F² in an open position. By having two or more notches K' in the catch K, the brush parts F' and F² may be held fully or only partly open, as desired and according to the size of the cuspidor. Now, it will be seen that when the several parts are in the position shown in Fig. 1, then the brush F is closed and can be readily passed through the contracted neck of the cuspidor into the lower enlarged body thereof, and then the operator pulls the ring J' upward to open the brush parts F' and F², as indicated in Fig. 2. The operator now takes hold of the sleeve D and moves the latter up and down, at the same time holding the handle A firmly, so that the

shaft C is caused to rotate in the handle A, whereby the brush F is caused to rotate within the body portion of the spittoon or cuspidor to clean the walls and top and bottom thereof. When this has been accomplished, the operator presses the spring-catch K and pushes the ring J' and its rod J downward to again close the brush parts to permit their removal from the cuspidor-body by pulling the handle A upward.

It will be seen that the cleaner is very simple and durable in construction, can be cheaply manufactured, and can be readily inserted and opened up in the cuspidor or spittoon, and then the brush can be revolved to clean the interior thereof, as before explained.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a cuspidor cleaner, the combination of a shaft having a handle and a head, a brush composed of two sections hinged to said head having adjacent inner faces and adapted to fold together, a block arranged to slide between the sections, and a rod guided on the head and connected to said block, substantially as set forth.

2. In a cuspidor cleaner, the combination of a shaft having a handle and a head, a brush composed of two sections hinged to the head,

having adjacent inner faces and adapted to fold together, a block arranged to slide between the sections, a rod guided on the head and connected to the block and means for locking said rod in position to said head, substantially as set forth.

3. A cuspidor cleaner, comprising a revolvable head, a brush made in two parts hinged to the under side of the said head, guideways secured on the opposite faces of the two parts of the brush, a block fitted to slide on the said guideways to open and close the brush parts, and a rod connected with the said block to move the latter up and down, substantially as shown and described.

4. A cuspidor cleaner, comprising a revolvable head, a brush made in two parts hinged to the under side of the said head, guideways secured on the opposite faces of the two parts of the brush, a block fitted to slide on the said guideways to open and close the brush parts, a rod connected with the said block to move the latter up and down, and a spring catch for locking the said rod in place when the brush parts are opened, as set forth.

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Witnesses:

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