

H. PEARL.
CAN STOPPER.

Patented Oct. 22, 1889.



INVENTOR

BY

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HENRY PEARL, OF MOUNT VERNON, ASSIGNOR OF ONE-HALF TO LEOPOLD WEIL, OF NEW YORK, N. Y.

CAN-STOPPER.

SPECIFICATION forming part of Letters Patent No. 413,546, dated October 22, 1889.

Application filed July 11, 1889. Serial No. 317,189. (No model.)

To all whom it may concern:

Be it known that I, HENRY PEARL, a citizen of the United States, residing at Mount Vernon, Westchester county, State of New York, have invented a certain new and useful Improvement in Can-Stoppers, of which the following is a specification.

My invention relates to automatic can-stoppers for volatile or other liquids, and has for its object the provision of a device simple in construction, cheap in manufacture, and efficient in practical use.

To attain the desired end my invention consists in the construction and arrangement of parts hereinafter described, and pointed out in the claim.

In the drawings which form a part of this specification, Figure 1 represents a perspective view of a can provided with my automatic stopper. Fig. 2 is a side elevation of the stopper in an open position. Fig. 3 is a top view of the same; and Figs. 4, 5, and 6 are sectional views, respectively on the lines *y y*, Fig. 3, *x x*, Fig. 4, and *x' x'*, Fig. 5.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A is a can or liquid receptacle made of metal or other suitable material. To its upper end is soldered or otherwise secured in an air-tight manner the nozzle B, preferably provided with an annular ring *b*, adapted to form a flaring mouth for the same. The nozzle B is provided with an outwardly and upwardly projecting arm C, which serves to support an integral rigid barrel D and an independent concentric movable barrel D', the barrel D being provided with a neck *d* and shoulder *d'*, and the barrel D' with an annular flange *d''*, for the purpose of affording a frictional connection between the barrels, so that the barrel D' may be turned to any desired position by manipulating the thumb-piece D², with which it is provided. The movable barrel D' is also provided with an extension or disk D³, which normally covers the nozzle B and forms the stopper proper, and which has a preferably inverted-cone-shaped cushion, of rubber or other elastic material, thereunder placed, the parts being suitably secured together, as by the washer *e* and rivet

e'. The barrels D D' are held together in a movable relation by the axial rod F, provided at one end with a head *f* and at the other extremity with a pin or spring cotter *f'*, as is clearly shown in the drawings.

Placed within the barrels D D', and coiled around the axial rod F, is the spiral spring G, the respective hook ends *g g'* of which are engaged with the barrels D D', in the present instance the hook *g'* resting in a groove *d''*, formed in the interior side wall of the barrel D', and the hook *g* being held in the recess *d''* in the opposite interior side wall of the barrel D.

In practical operation, the cushion E is normally held against and engages with the mouth of the nozzle B when the stopper is closed by means of the resiliency of the spring G, thereby serving as a cork, and the elastic properties of the same adapt it to project into and conform to the shape of the mouth and to form an air-tight seal therefor.

By my device the can is at all times sealed, except when manipulated for the purpose of filling or emptying, and the stopper will close automatically as soon as the pressure on the thumb-piece D² is removed.

The operating parts are protected, and are thus not liable to become broken or deranged through accident or usage, and if by any means the can should be overturned during transportation or while in use any leakage of the same will be prevented.

What I claim as new, and desire to secure by Letters Patent, is—

In a can-stopper, the combination, with the nozzle B, provided with the arm C, carrying the barrel D, of the spring-actuated barrel D', journaled on the barrel D and provided with the stopper D³, and the actuating-spring carried by said barrels, substantially as described.

In testimony of the foregoing specification I do hereby sign the same in the city, county, and State of New York, this 21st day of June, A. D. 1889.

HENRY PEARL.

Witnesses:

CHAS. W. FORBES,
CHAS. HANIMANN.