

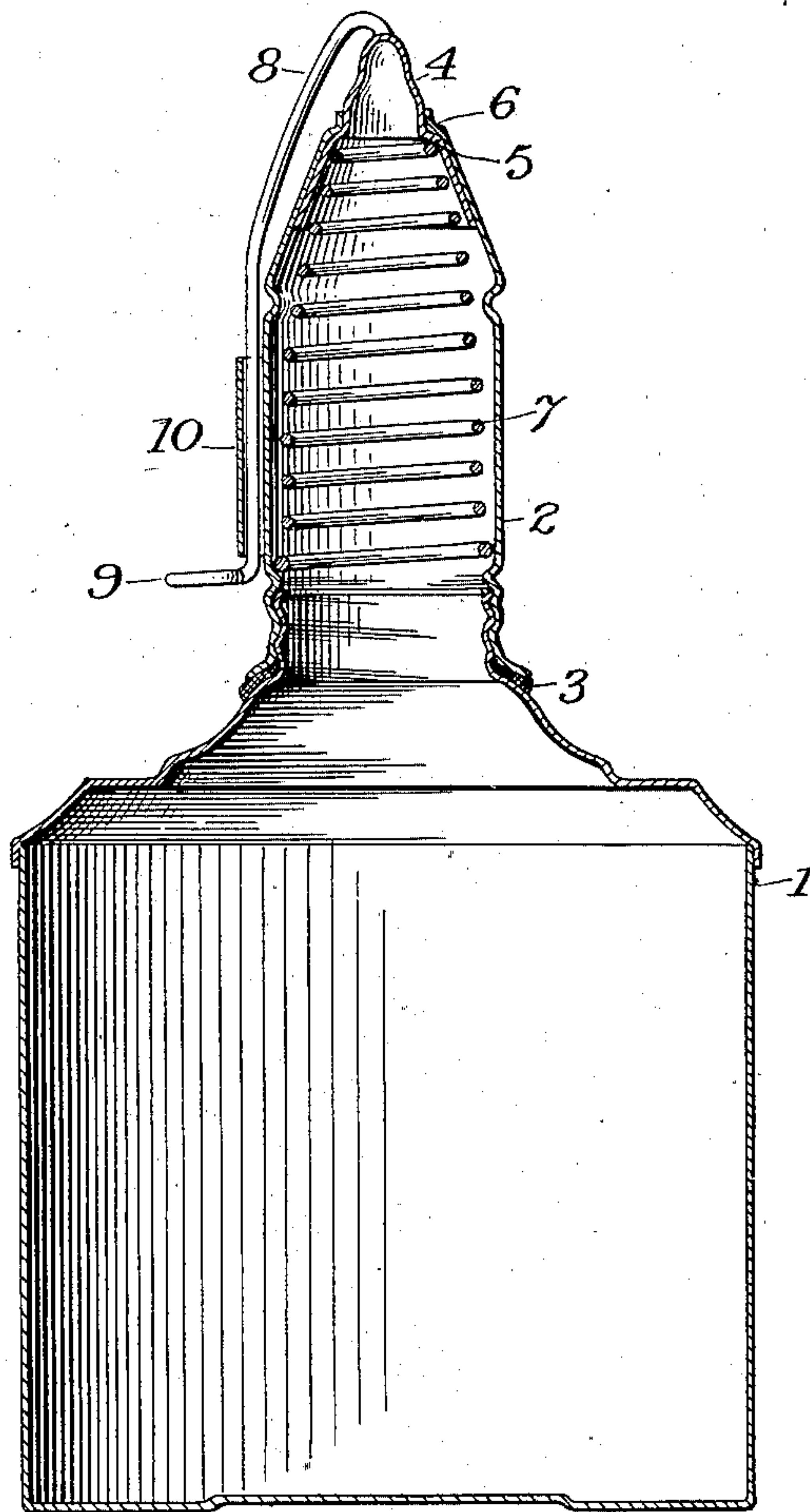
No. 656,417.

Patented Aug. 21, 1900.

F. R. MCINTYRE.
DISPENSING CAN.

(Application filed Dec. 14, 1899.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

FRANK ROBERT MCINTYRE, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT
AND MESNE ASSIGNMENTS, TO ROBERT HOE AND CHARLES W. CAR-
PENTER, OF SAME PLACE.

DISPENSING-CAN.

SPECIFICATION forming part of Letters Patent No. 656,417, dated August 21, 1900.

Application filed December 14, 1899. Serial No. 740,264. (No model.)

To all whom it may concern:

Be it known that I, FRANK ROBERT MCINTYRE, a citizen of the United States, residing at 604 St. Anns avenue, New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Dispensing-Cans, fully described and represented in the following specification and the accompanying drawing, forming a part of the same.

This invention relates to certain improvements in stoppers for dispensing-cans.

In dispensing-cans for holding volatile liquids—such, for instance, as benzine—it is necessary that the delivery-spout of the can be closed at all times except when the liquid is being dispensed therefrom. It has been customary, therefore, to close the spouts of dispensing-cans with spring-seated stoppers, the stoppers being located in the interior of the spouts and being forced outwardly against a seat formed at or near the opening of the spout by a spring which is suitably secured in the interior of the spout. In the class of cans to which reference is made the stopper is formed so as to protrude some little distance from the end of the spout. When, therefore, it is desired to operate the stopper so as to permit the liquid to flow from the can, the end of the stopper is placed against the part on which the liquid is to be poured and is forced inward against the stress of its spring by pressing the can against said part. This opens the spout and the liquid is allowed to flow out. When the pressure is removed from the end of the stopper, the spring immediately seats the stopper against the shoulder or other seat formed in the spout. Cans of the class above described are commonly used in machine-shops for holding benzene, naphtha, and other similar volatile fluids. It has been found, however, that while such cans are effective for use in situations where the stopper can be forced inwardly by pressure against the part on which the liquid is to be poured it frequently happens that it is necessary or desirable to pour the liquid out of the can upon some part which cannot readily be reached by the protruding end of the stopper. Various devices have therefore been

heretofore proposed for enabling the stoppers of this class of cans to be manipulated by means other than pressing the stopper against the part on which the liquid is to be poured. The devices so far suggested are more or less complicated and expensive to make. Simplicity in operation and cheapness in construction are, however, very necessary features in cans of this description, and a slight increase in the cost of said cans, necessitating an increase in their price, makes such cans practically unsalable in the market.

It is the object of this invention to produce an operating device for stoppers of the class before described which shall be simple in operation, exceedingly cheap to construct, and which will therefore add little or nothing to the market price of the can and which at the same time, while it enables the can to be opened and the contents dispensed therefrom without pressing upon the protruding end of the stopper, will also not prevent the stopper of the can from being operated in this manner when desired.

With this and other objects in view the invention consists in certain constructions and in certain parts, improvements, and combinations, as will be fully described hereinafter and then pointed out in the claims hereunto appended.

In the accompanying drawing, which forms a part of this specification, the figure illustrates in vertical section a metallic dispensing-can having the improved stopper-operating device attached thereto.

Referring to the drawing, 1 indicates a can which is provided with the usual screw-threaded spout. 2, this spout being seated against a gasket 3, which surrounds the neck of the can. The opening in the spout is closed by a stopper 4, the end of which preferably protrudes from the opening in the spout. The stopper is formed with a shoulder 5, which is forced against a seat 6, formed on the spout by means of a spring 7. The spring 7 may be retained in the spout in any suitable manner. It is shown, however, as resting on a shoulder formed by the upper end of the threads by which the stopper is secured to the can.

The device by which the stopper is operated may be varied somewhat in the details of its construction; but it will preferably consist of a long bent wire 8, which is fixedly secured to the end of the stopper 4 in any suitable manner—as, for instance, by soldering. The wire 8 extends down alongside the spout and is provided at its lower end with a loop 9, which forms a finger-rest. This finger-rest is located sufficiently far away from the delivery end of the spout, so as not to interfere with inserting the spout into narrow openings between closely-adjacent parts of machinery. The side of the spout is preferably provided with a guide 10, through which the wire 8 passes and by which its action is in a degree controlled, since when it is used the operating end of the wire which is secured to the stopper is held to move in a line which passes through the center of the coils of the spring when the stopper is pulled inward. The stopper therefore when it is drawn back by the wire presses evenly upon the coils of the spring and is not tipped or canted. The benzine or other contents of the can therefore pass around all sides of the stopper, thus insuring a good delivery. This guide is not, however, absolutely essential, and may be omitted, if desired.

By locating the finger-wire close to the body of the spout and extending it down on one side thereof, so that the finger-wire is brought near to the breast of the can, the diameter of the spout is not appreciably increased, especially when the stopper is drawn back. The spout with the finger-wire attachment can therefore be inserted into an opening but little larger than one which would admit the spout alone. Furthermore, the device is exceedingly cheap in construction and will not appreciably add to the cost of manufacture of the can.

What is claimed is—

1. In a dispensing-can, the combination

with the spout, of a spring-seated stopper normally closing the opening therein, of an operating-wire rigidly secured to the stopper, said wire extending down along one side only of the spout and close thereto, and being bent to form a finger-hold lying above the breast of the can, substantially as described.

2. In a dispensing-can, the combination with the spout, of a spring-seated stopper normally closing the opening therein and protruding through said opening, of an operating-wire rigidly secured to the stopper, said wire extending down along one side only of the spout and close thereto, and being bent to form a finger-hold lying above the breast of the can, substantially as described.

3. In a dispensing-can, the combination with the spout, of a spring-seated stopper normally closing the spout, an operating-wire rigidly secured to the stopper, said wire extending down along one side only of the spout and close thereto, and being bent to form a finger-hold lying upon the breast of the can, and a guide secured to the side of the spout through which the wire passes, substantially as described.

4. In a dispensing-can, the combination with the spout, of a spring-seated stopper normally closing the spout and protruding through the opening therein, an operating-wire rigidly secured to the stopper, said wire extending down along one side only of the spout and close thereto, and being bent to form a finger-hold lying above the breast of the can, and a guide secured to the side of the spout through which the wire passes, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FRANK ROBERT MCINTYRE.

Witnesses:

F. W. H. CRANE,

JOHN C. MCCAUSLAN.