No. 608,271.

Patented Aug. 2, 1898.

E. M. RAIGUEL.

VALVE STOPPER FOR BOTTLES.

(Application filed Oct. 8, 1897.)

(No Model.)

Fig. 1.

R

R

X

Tig. Ri

Witnesses. At B. Hallock.

Edgar M. Raiguet, by Gent Holgate

United States Patent Office.

EDGAR M. RAIGUEL, OF PHILADELPHIA, PENNSYLVANIA.

VALVE-STOPPER FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 608,271, dated August 2, 1898.

Application filed October 8, 1897. Serial No. 654,542. (No model.)

To all whom it may concern:

Be it known that I, EDGAR M. RAIGUEL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and 5 State of Pennsylvania, have invented a certain new and useful Improvement in Valve-Stoppers for Bottles, of which the following is a specification.

My invention relates to a new and useful 10 improvement in valve-stoppers for bottles and the like, and has for its object to provide a simple, cheap, and effective device for closing the mouth of a bottle and yet permitting the ready withdrawal of any portion of its 15 contents, and especially when small portions of the contents are to be withdrawn at various times and delivered to small receptacles—as, for instance, in ink-bottles.

With these ends in view this invention con-20 sists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may under-25 stand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents an embodiment of my improvement, showing a method of attaching a valve-cap to an ordinary stopper; Fig. 2, a modification of this construction, showing a valve-cap adapted to be secured directly to 35 the neck of a bottle without the use of the ordinary stopper.

In carrying out my invention I provide a metal cap T, which is hollow and has therein a suitable packing, as indicated at U, and 40 through this cap and packing I pass the tapered valve V, which is hollow and has openings R formed in one side thereof, which are adapted to register with the vertical openings in the packing when the plug is turned to the 45 proper position. The lower portion of the cap is threaded internally, as indicated, to enable it to be secured to the stopper X, through which suitable passages are formed registering with the openings in the packing.

It will be seen that when the plug is turned to the position shown in Fig. 1 the openings therein will register with the passages in the stopper, and when the bottle is tipped in the usual manner for pouring the contents therefrom said contents will flow outward through 55 the passage S' and the air will flow inward through the upper portion of the plug and the passage S, replacing the outflowing liquid.

A modification is shown in Fig. 2, in which the cap Y is provided with threads Z, where- 60 by it is secured directly to the neck of the bottle, the packing a being confined between the edge of the mouth and the top of the cap. The arrangement of the passages in the packing and the form of plug-valve are similar in 65 construction to the parts described in connection with Fig:1, and the operation of the device is identical therewith. Attention is especially directed to the fact that by threading the cap downward on the neck the packing will be 70 compressed and looseness due to wear will thus be compensated for.

It will also be noted that various minor details of construction may be slightly changed, and yet the spirit of the invention will not 75

be departed from.

Having thus fully described my invention, what I claim as new and useful is—

1. A stopper for bottles consisting of a hollow metal cap, threaded internally at its lower 80 end, a packing filling the interior of the cap beyond the screw-threaded portion, and a hollow tapered plug run transversely through the packing and cap, said plug having openings in one side thereof registering with ver- 85 tical passages in the packing, as and for the purpose set forth.

2. A stopper consisting of a hollow, metal cap threaded internally at its lower end, a cork threaded to said cap, a packing inter- 90 posed between the end of the cork and top of the cap, said packing being adapted to be compressed by the threading of the cap downwardly whereby the wear thereon will be compensated for, a hollow, tapered plug passed 95 transversely through the cap and packing, said plug having openings in one side thereof registering with vertical passages in the packing and cork, as and for the purpose set

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

EDGAR M. RAIGUEL.

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Witnesses:

S. S. WILLIAMSON, R. M. PIERCE.