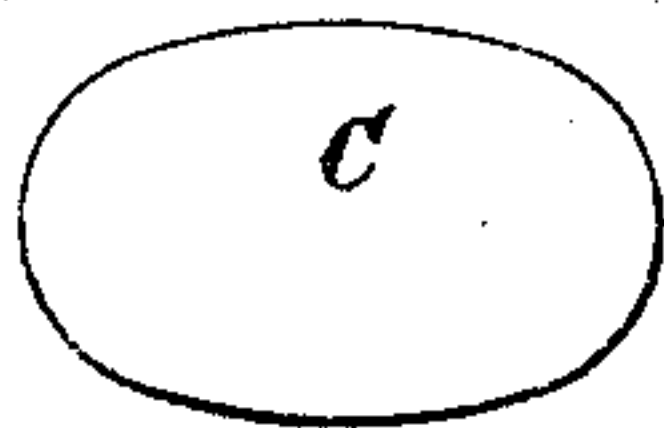


H. S. CARLEY.  
Soda-Water Bottle-Stoppers.

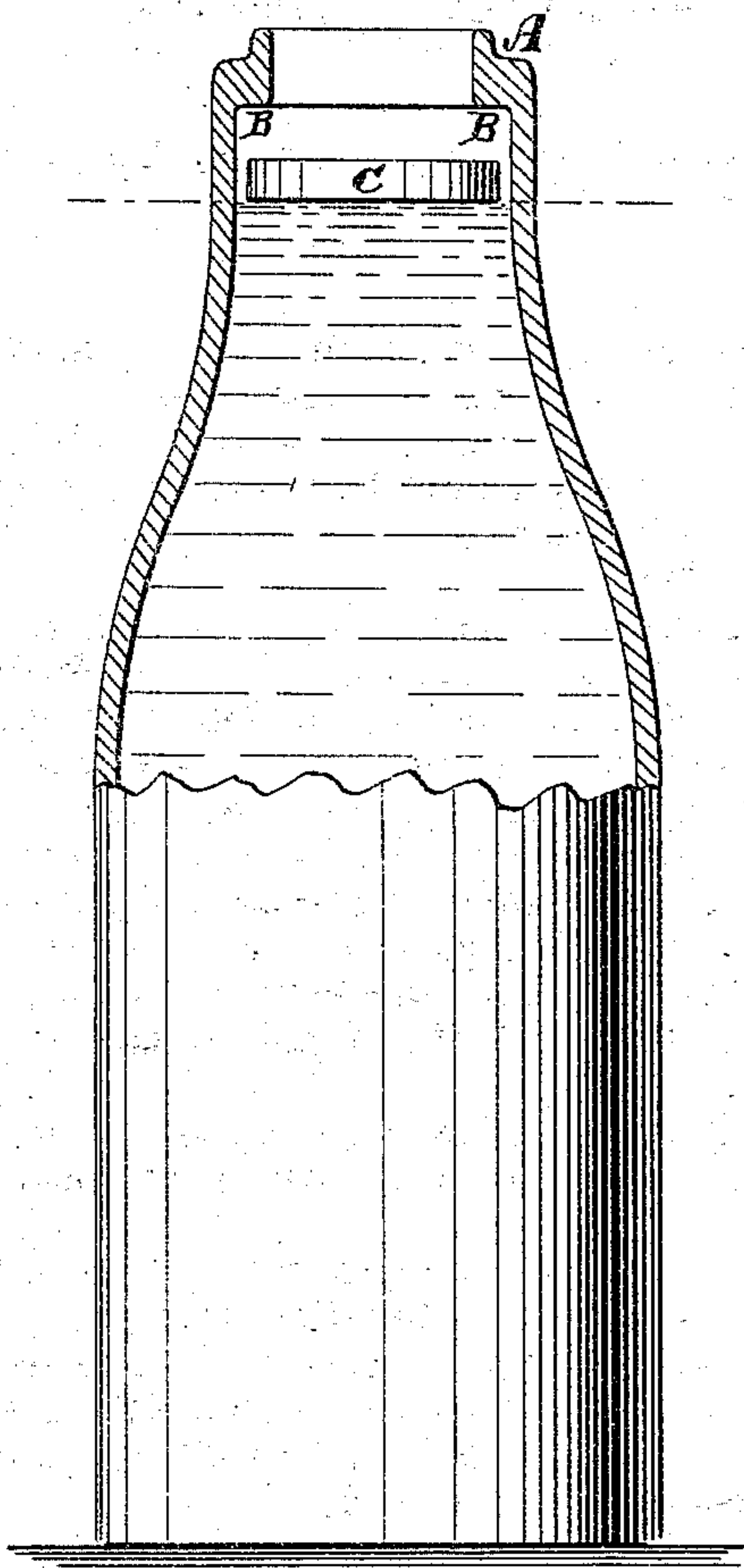
No. 154,371.

Patented Aug. 25, 1874.

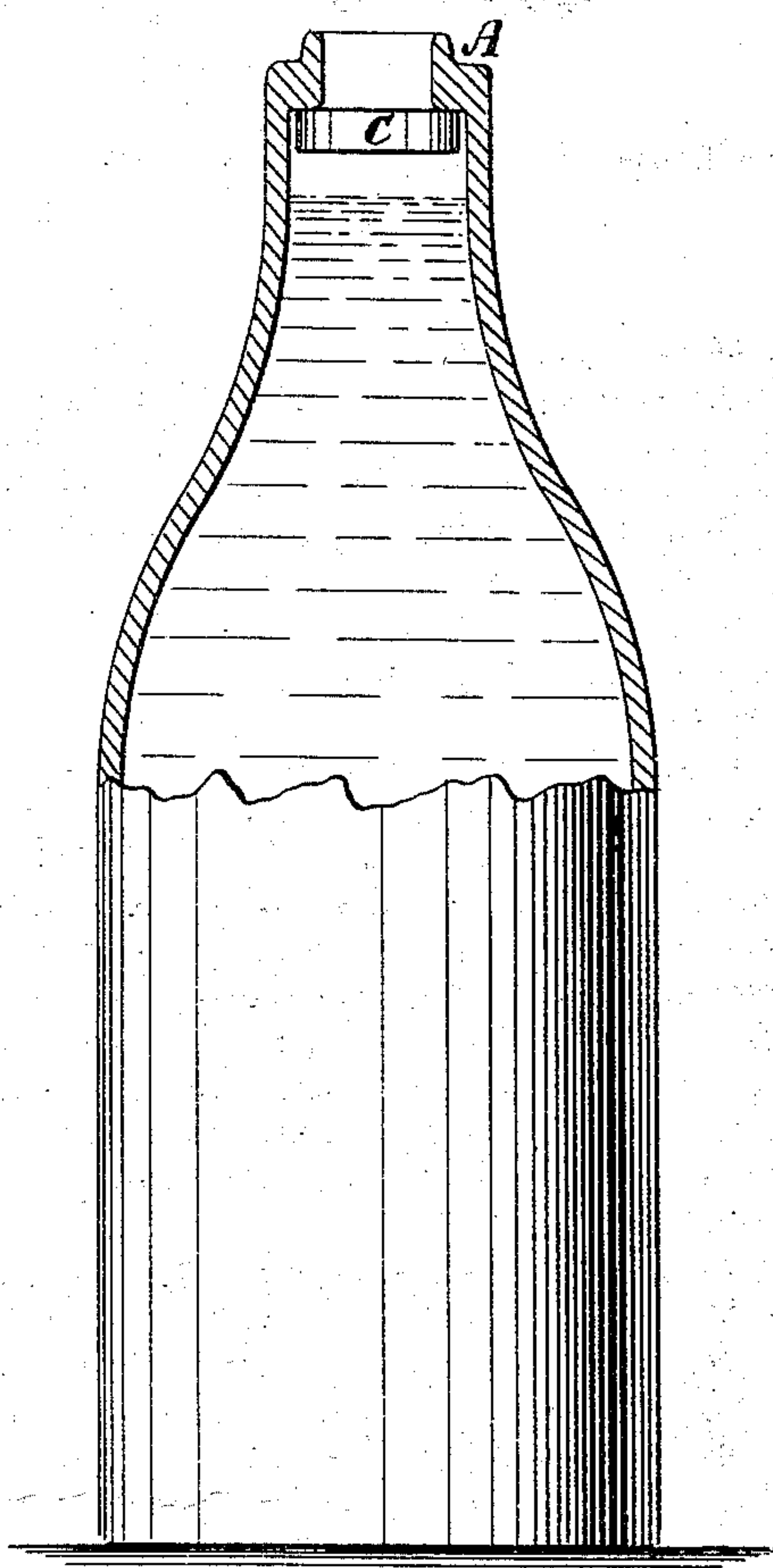
*Fig. 3.*



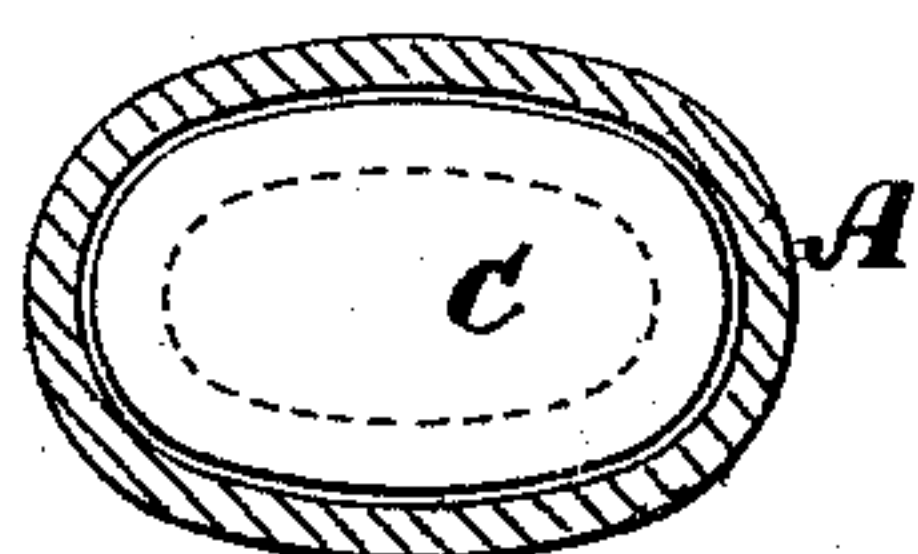
*Fig. 1.*



*Fig. 2.*



*Fig. 4.*



WITNESSES:

*A. Benneken & Co.*  
*A. F. Terry*

INVENTOR:

*H. S. Carley*  
BY *Mumford*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HORACE S. CARLEY, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND  
SAMUEL W. SAXTON, OF SAME PLACE.

## IMPROVEMENT IN SODA-WATER-BOTTLE STOPPERS.

Specification forming part of Letters Patent No. **154,371**, dated August 25, 1874; application filed  
August 10, 1874.

*To all whom it may concern:*

Be it known that I, HORACE S. CARLEY, of the city, county, and State of New York, have invented a new and Improved Soda-Water-Bottle Stopper, of which the following is a specification:

My invention consists of an elliptical or other equivalent form for the nozzle of a bottle for soda-water or other gaseous liquid, with a seat or shoulder at the inner end of the inside for a valve or stopper, and a stopper of equivalent form made of light material, as cork, wood, leather, or other substance, which will float on the liquid, whereby I obtain a self-closing stopper that can readily be put in and taken out of the bottle, to facilitate the cleaning or purifying of it and the bottle before refilling, and at the same time I have a stopper of the most simple and cheap construction.

I am aware that self-closing stoppers, and others closing from the inside of a bottle, have been used, but they have all been used with round-nozzled bottles, which made it necessary to use packing, which had to be put on after the body of the stopper had been put in the bottle, and prevented the taking of the stopper out without too much labor, and packing is objectionable on account of the effect of the gases upon it.

Figure 1 is a section of a bottle with my

improved stopper floating on the liquid ready to be closed upon its seat by the gas. Fig. 2 is a section, showing the stopper closed up. Fig. 3 is a plan of the stopper; and Fig. 4 is a cross-section of the nozzle, taken on the line *xx*, Fig. 1.

A is the nozzle of the bottle, which is made elliptical in cross-section, or of any form equivalent thereto, having one long and one short diameter. B is the seat or shoulder, at the bottom of the inside of the nozzle, for the stopper; and C is the stopper, of cork, wood, or other approved material, the said stopper being of corresponding form, so that by arranging its short diameter on the long diameter of the nozzle it will pass in and out of the bottle readily.

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

A stopper, C, of elliptical or other equivalent form, in combination with a bottle for soda-water or other gaseous liquids having a nozzle of corresponding form, with a seat, B, at the lower end of the inside of the nozzle, substantially as specified.

HORACE S. CARLEY.

Witnesses:

T. B. MOSHER,  
ALEX. F. ROBERTS.