

## October 2012 MarbleCollecting.com Newsletter

### A HISTORY OF CODD MARBLE STOPPER BOTTLES

Hiram Codd (b. January 10, 1838 – d. February 18, 1887) was an English engineer who, in 1872, patented a bottle filled under gas pressure which pushed a marble against a rubber washer in the neck, creating a perfect seal. Using a specially designed tool, the marble could be pushed down into a crimp in the bottle neck, allowing the liquid to be poured. A specially designed machine was used to fill the bottles.



Codd Bottle

Early in his working life Codd became a mechanical engineer. At the age of 23, while working for the 'British and Foreign Cork Company', he greatly improved the production of corks. As a result, he was offered the position of 'traveller for the business' (a traveling salesman). He soon recognized a need for better bottle filling machines and a new type of enclosure to alleviate the need of corks (which were expensive since cork trees are not native to England, and tend to dry out if the bottle is not left on its side). Nine years later, in 1870, Codd registered his invention for a bottle with a marble stopper with the British Patent Office. The invention used a glass marble seated against a rubber gasket in the mouth of the bottle to seal in carbonated beverages. His bottle, the Codd, became a standard in Europe and the British Empire.

At the same time, Codd devised a patented bottling machine. To understand the mineral water trade better, and to prove the worth of his invention, he experimented at a small mineral water works on the Caledonian Road, Islington in London. A patent issued to him in November 1870 stated he was a soda water manufacturer living at 6 Park Place, Caledonian Road, Islington.

Following the invention of his bottle, he pursued his idea of a glass marble stopper with bottle makers. The idea was slow to catch on, but eventually Messrs. Alexander and Austin of Blaydon and W. Brooke of Hunslet showed an interest in his invention.

Also in 1872, he was introduced to Mr. Richard Barrett, a printer, of Mark Lane, London EC, whose two sons owned the Malvern Mineral Water Co. at Grove Lane, Camberwell. Because of Barrett's sons' belief in Codd's invention, Richard was induced to become co-partner in all of Hiram Codd's business. This enabled Codd to continue his research into the marble stopper idea and in particular the tool used to form the groove in the lip of the bottle. The following year, he perfected his marble-stoppered bottle.

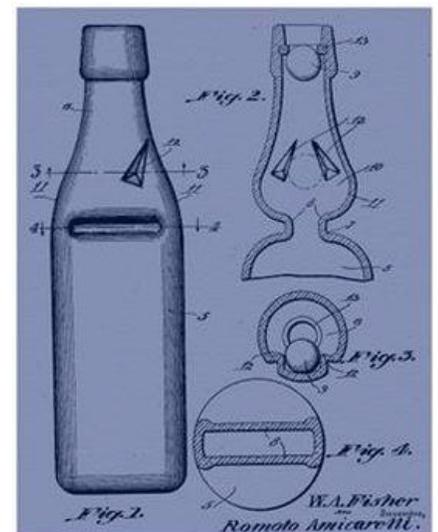
Mineral water soda producers who wanted to use Codd's marble stopper bottles had to pay a yearly fee for a license to use his patent bottle. By mid 1873, he had granted 20 licenses and received a further 50 applications. This was boosted further by a Trade Show held in London in the same year. That year he also met Ben Rylands, and by 1877 they formed a partnership and started the 'Hope Glass Works' in Barnsley.



Antique Codd Bottle Filler

The following year, Codd offered the license free to bottle manufacturers, as long as they purchased the marbles, sealing rings and groove tool solely from him. Codd had two factories in London solely producing marbles, one in Kennington and the other in Camberwell, which was run by F. Barrett, the son of Richard, his financial backer.

The glass bottles were produced with the name of the mineral water company on them. A water company would not re-use a competitors bottle, and various schemes were



Codd Bottle Patent



Antique Three Bottle Filler



Codd Bottle Opener

introduced to return the empty bottles to their rightful company. In 1880, Codd introduced the idea of a bottle exchange in London. This was slow to start, but eventually caught on and spread throughout England. As a result, thousands of empty bottles could be returned to their rightful owners via the bottle exchanges, who charged a small fee on each bottle for providing this service (1 penny [old] per gross of bottles). This dramatically lowered the cost of bottled mineral water to consumers.

Late in 1881, owing to failing health, Barrett retired and passed the management of the Codd's Patents solely to Hiram Codd. The Malvern Mineral Water Works and both marble producing factories continued to thrive.

In February of 1884, Codd's wife passed away, plunging Codd into a depressive state. Later that year he sold his share in Hope Glass Works to Ben Rylands' son, Dan. He also did not renew any of his earlier patents, so glassworks that previously required a licence could now manufacture his marbles and bottles without fear of prosecution. Early examples of these bottles sometimes had "CODD'S EXPIRED PATENT" embossed on them.

Codd passed away on February 18, 1887 at his family home, Suffolk Lodge, 162 Brixton Road, Brixton, London from "congestion of the brain and chronic disease of the liver and kidneys" and is buried in London's Brompton Cemetery.



Codd Bottle Opener



Codd Marble

Codd Marbles were originally categorized as 'bullet-mold marbles' by early marble collectors, due to the distinctive seam and flat spot that was left on them by the glass mold. Children would often break open the bottles to get the marble inside. These marbles acquired the name "Allie-Bops" during the 1920s. My father-in-law, who grew up in England during the 1930s and 1940s, remembers breaking open these bottles to get the marbles inside.

Codd's patented marble stopper bottle may be over 125 years old, but they are still manufactured in India by the Khandelwal glass works. These bottles now contain machine made clearies with no seam or flat spot. They can be found throughout India.



Codd Bottle Filler still in use in Goa India