

(No Model.)

H. CODD & D. RYLANDS.

BOTTLE FOR CONTAINING AERATED LIQUIDS.

No. 270,392.

Patented Jan. 9, 1883.

Fig. 1.

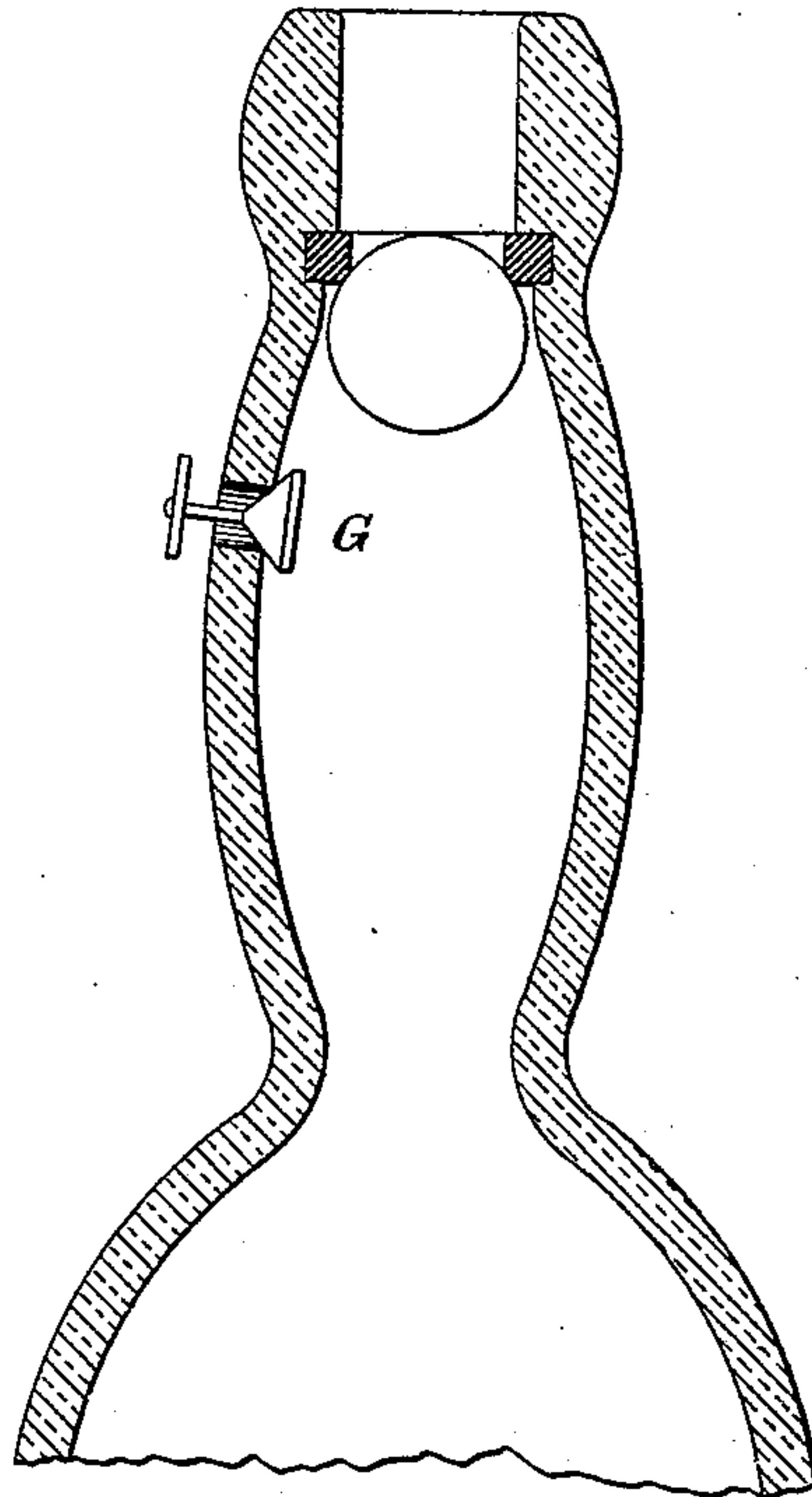
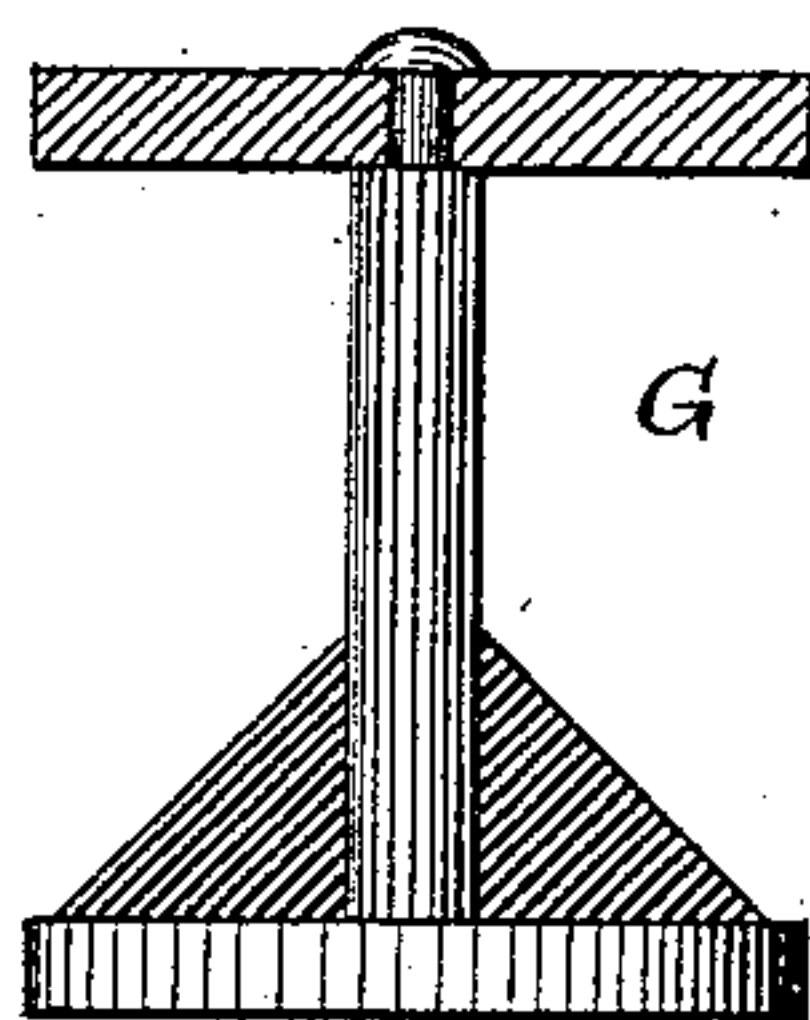


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

HIRAM CODD, OF LONDON, AND DAN RYLANDS, OF BARNSELY, COUNTY OF YORK, ENGLAND.

BOTTLE FOR CONTAINING AERATED LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 270,392, dated January 9, 1883.

Application filed September 7, 1882. (No model.) Patented in England July 8, 1882, No. 3,252.

To all whom it may concern:

Be it known that we, HIRAM CODD, a subject of the Queen of Great Britain, residing at 58 King William Street, in the city of London, and DAN RYLANDS, a subject of the Queen of Great Britain, residing at Barnsley, in the county of York, England, have invented certain new and useful Improvements in Bottles for Containing Aerated Liquids, (for which a patent has been granted in Great Britain, No. 3,252, dated July 8, 1882,) of which the following is a specification.

This invention relates to bottles which have internal stoppers that are to be held up by the pressure of gas to the mouths of the bottles, so as to close them, and has for its object to permit of such bottles being opened without the necessity of in any way touching the stoppers or of pressing them inward into the bottles. For this purpose we form through the side of the neck of the bottle a small hole, which we subsequently close by a small valve on the inside. The stem of the valve we make to project outward through the hole, and to its outer end we affix a small head, by pressing upon which the valve may be pressed inward a short distance. The hole is formed through the neck just after the bottle has, in the ordinary manner, been blown in a mold, and while it still remains hot, after being removed therefrom. When the bottle has been removed from the mold a small punch is driven from the inside through the neck, just below where the head has subsequently to be formed around it. For bottles already made the hole may be drilled by a sand-blast or otherwise. The valve is preferably formed of a small disk, with on one side of it a stem projecting from its center. A small rivet-shaped disk or washer, of elastic material, with a hole perforated through its center, is threaded onto the stem. The stem is then passed through the hole in the neck of the bottle from the inside, and onto its outer end is screwed or otherwise secured the small head.

When the bottle is charged with aerated liquid the pressure within the bottle presses the valve against the inside of the neck and keeps the hole closed. When the bottle is to be opened the head of the valve may be pressed on, so as to open the valve and allow of the escape of gas from the interior of the bottle. The diminution of pressure thereby produced

within the bottle quickly causes the stopper to drop away from the mouth of the bottle by reason of its own weight, and the contents can then be poured out.

In the drawings hereunto annexed we have shown as an example one form of internally-stoppered bottle fitted with a small valve in the neck for the purpose above described; but the necks of bottles fitted with other forms of internal stoppers may similarly be fitted with a small valve.

Figure 1 shows the neck of the bottle in section, and Fig. 2 represents the valve, partly in section, on an enlarged scale.

The bottle has an internal globular stopper of glass, which rests against a ring of vulcanized india-rubber held in a groove formed around the interior of the neck. A valve-opening is provided in the neck of the bottle, below the seat, for the stopper.

The valve G is composed of a small disk with a wire stem projecting from it. Over the wire is placed a conical piece of india-rubber or other elastic material. The wire stem is passed through the hole from inside the neck, and a disk or head is then riveted on or otherwise secured to the outer end of the stem.

Having thus described the nature of our invention and the manner of performing the same, we would have it understood that we claim—

1. A bottle constructed substantially as described, to adapt it to be closed by an internal stopper, and having a valved opening at the side of its neck, below the stopper-seat, substantially as and for the purpose hereinbefore set forth.

2. The combination, substantially as hereinbefore set forth, of the bottle, the internal stopper, and the opening in the neck provided with a valve, for the purpose described.

HIRAM CODD.
DAN RYLANDS.

Witnesses to the signature of Hiram Codd:

JOHN DEAN,

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Witnesses to the signature of Dan Rylands:

BENJ. BURDEKIN,

Notary Public and Sol., Sheffield, England.

CHAS. B. HOBBS,

His Clerk.