

## BOTTLE OPENER

This invention relates to a bottle opener for removing a cork from a wine bottle safely and quickly.

Broadly speaking, the present invention uses compressed air to open a wine bottle. In this regard, the bottle opener of the invention includes a needle having a fluid inlet and a fluid outlet, the fluid inlet being spaced from the fluid outlet, and the needle being sized to pass through a conventional cork in a wine bottle, in use, so that the fluid inlet is locatable outside the wine bottle and the fluid outlet is locatable inside the wine bottle. A compressed air cannister is operable to provide compressed air to the fluid inlet of the needle.

BRIEF DESCRIPTION OF THE DRAWINGS

- FIG. 1 is a sectional view of the main components of a bottle opener according to the present invention in an assembled condition;
- FIG. 2 is a sectional view of the main components of the bottle opener according to the invention in an unassembled condition;
- FIG. 3 is a sectional view of a neck of a wine bottle inserted into the bottle opener of the invention prior to the removal of a cork from the wine bottle; and
- FIG. 4 is a sectional view of the bottle opener after the removal of the cork from the wine bottle.

**DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT**

Below is a detailed description of a preferred embodiment of the invention with reference to the accompanying drawings.

It will be appreciated that the embodiment of the invention described below is provided by way of example only, and that the scope of the invention should not be limited to the specific details provided below.

With reference to FIGS. 1 and 2 of the drawings, a bottle opener according to the invention includes a syringe 2 in the form of a hollow, tube-shaped body for receiving a compressed air cannister 7. A needle 3 is attached to a first end of the syringe 2, and a cap 4 is attached to a second, opposed end of the syringe 2.

The first end of the syringe 2 is formed with an enlarged portion 21 having an outer diameter which is slightly larger than the outer diameter of the remaining portion of the syringe. The first end of the syringe also includes a socket having an internal thread, as shown.

The needle 3 includes a base 31 and a tube 32. The base 31 is geometrically shaped and carries an external thread along a portion of its outer surface 311. The external thread on the needle 3 corresponds with the internal thread on the syringe 2 to allow for threaded connection of the needle to the syringe. The free end of the needle tube 32 includes an air outlet 321, the purpose of which will be described in more detail below.

As best seen in FIG. 2, the cap 4 includes an internal thread and the second end of the syringe 2 includes a corresponding external thread to allow for threaded connection of the cap 4 to the syringe 2. An upper opening 41 in the cap 4 provides access to the compressed air cannister 7 inside the syringe 2, in use.

A slide jacket 5, which is formed from a generally pipe-shaped body, has a first end 51 with a reduced internal diameter relative to the internal diameter of the remaining portion of the slide jacket. The internal diameter of the first end 51 of the slide jacket 5 is smaller than the outer diameter of the enlarged portion 21 of the syringe 2 so as to prevent the enlarged portion 21 from passing through the first end 51 of the slide jacket. An opposed, second end 52 of the slide jacket 5 carries an internal thread, as best seen in FIG. 2 of the drawings.

The bottle opener also includes a bottle holder 6 (see FIG. 2) which includes a base 61. An external thread 62 on the base 61 corresponds with the internal thread on the second end 52 of the slide jacket 5 to allow for threaded connection of the bottle holder 6 to the slide jacket 5. A cylindrical portion 63 extends from the base 61 of the bottle holder 6, as shown, and defines a socket which is sized to receive the enlarged portion 21 of the syringe 2 (see FIG. 1). The base 61 also defines an aperture 64 which is sized to receive the needle 3.

Referring now to FIGS. 3 and 4 of the drawings, in use, a neck of a wine bottle 8 (which is sealed with a cork 9) is inserted into the bottle holder 6 and the syringe 2 is displaced downwardly into the position illustrated in FIG 3, causing the needle tube 32 to pass through the cork 9 so as to locate the free end of the needle tube 32 within the wine bottle 8. Then, using the opening 41 in the cap 4, the upper end of the compressed air cannister 7 is pressed down gently to release compressed air from the cannister 7. The compressed air flows along the needle 3 and into the wine bottle 8 via the air outlet 321 at the free end of the needle tube 32. The pressure inside the wine bottle 8 increases as more compressed air is released from the cannister 7 until the internal pressure is sufficient to push the cork 9 out of the wine bottle 8.

The cork 9 is usually retained on the needle tube 32 after its removal from the wine bottle 8. To dislodge the cork from the needle tube 32, the syringe 2 and the slide jacket 5 are displaced in opposite directions so as to allow the needle tube 32 to be withdrawn through the aperture 64 in the base 61 of the bottle holder 6, as illustrated in FIG. 4 of the drawings.

It will be appreciated that the bottle opener of the invention allows a user to remove a cork

from a wine bottle relatively easily and safely. In addition, the components of the bottle opener of the invention are relatively simple and easy to manufacture.

Claims omitted.

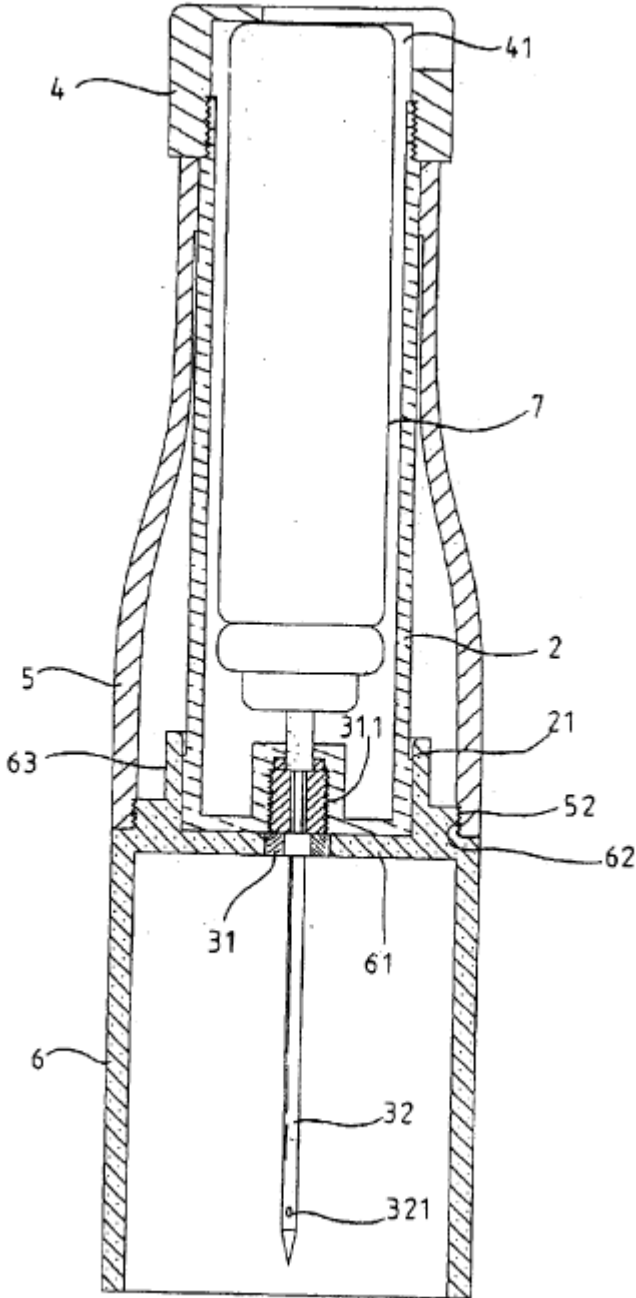


FIG. 1

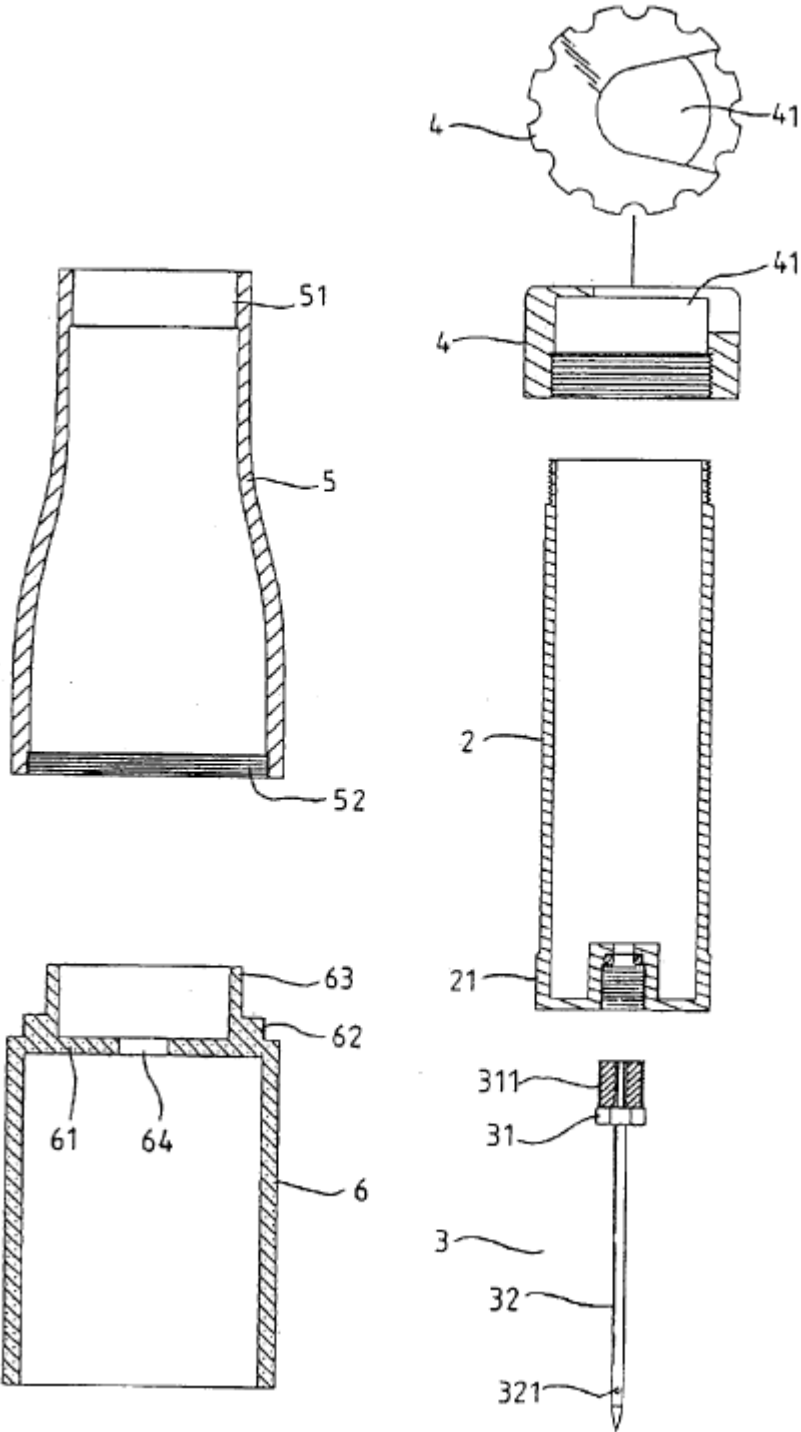


FIG. 2

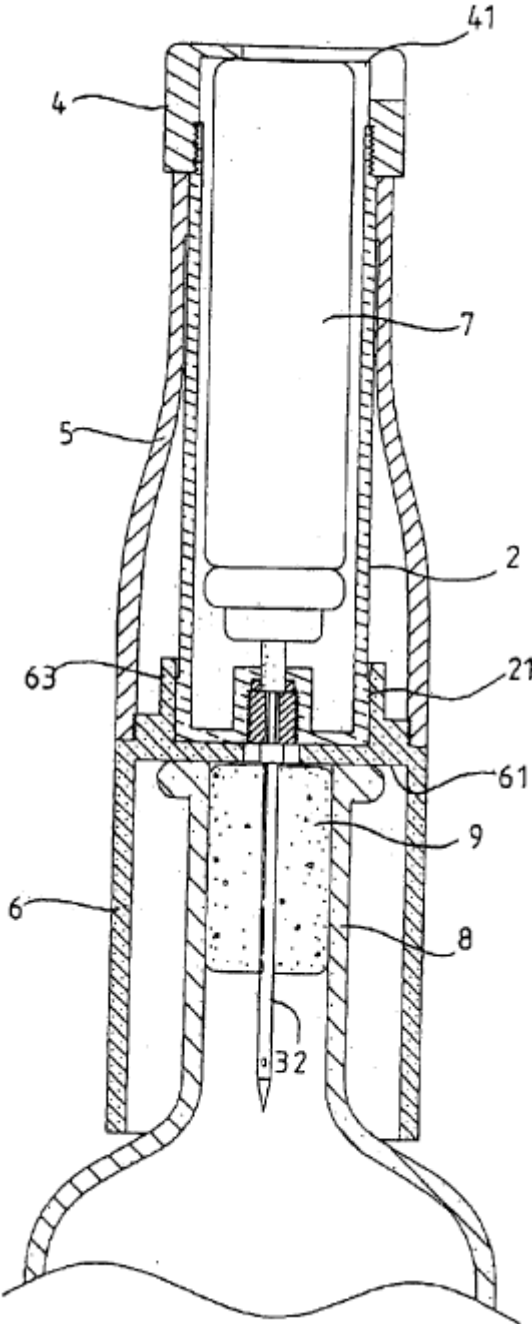


FIG. 3

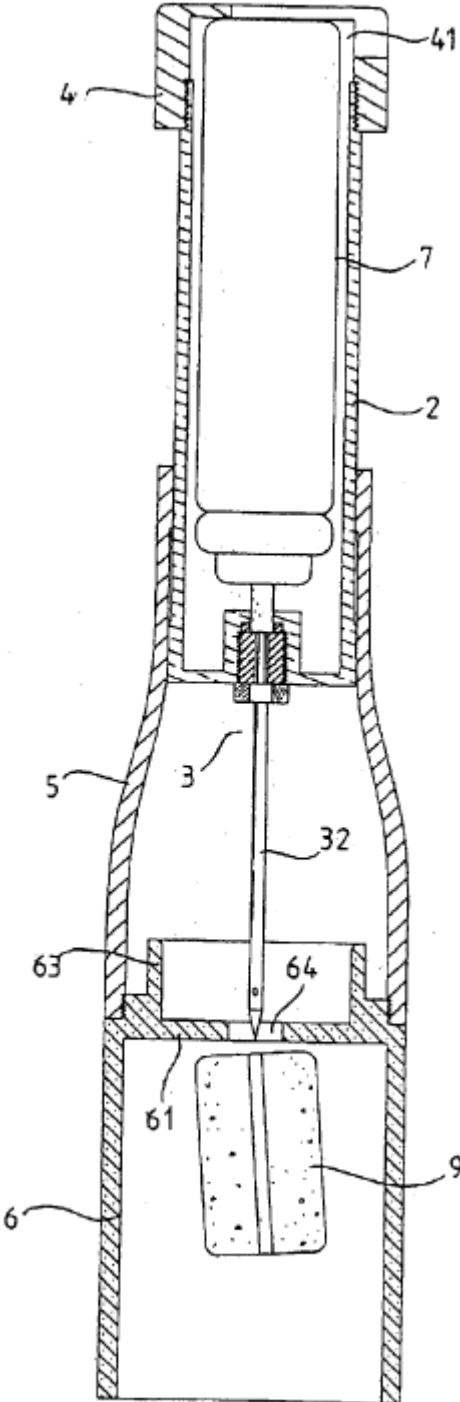


FIG. 4