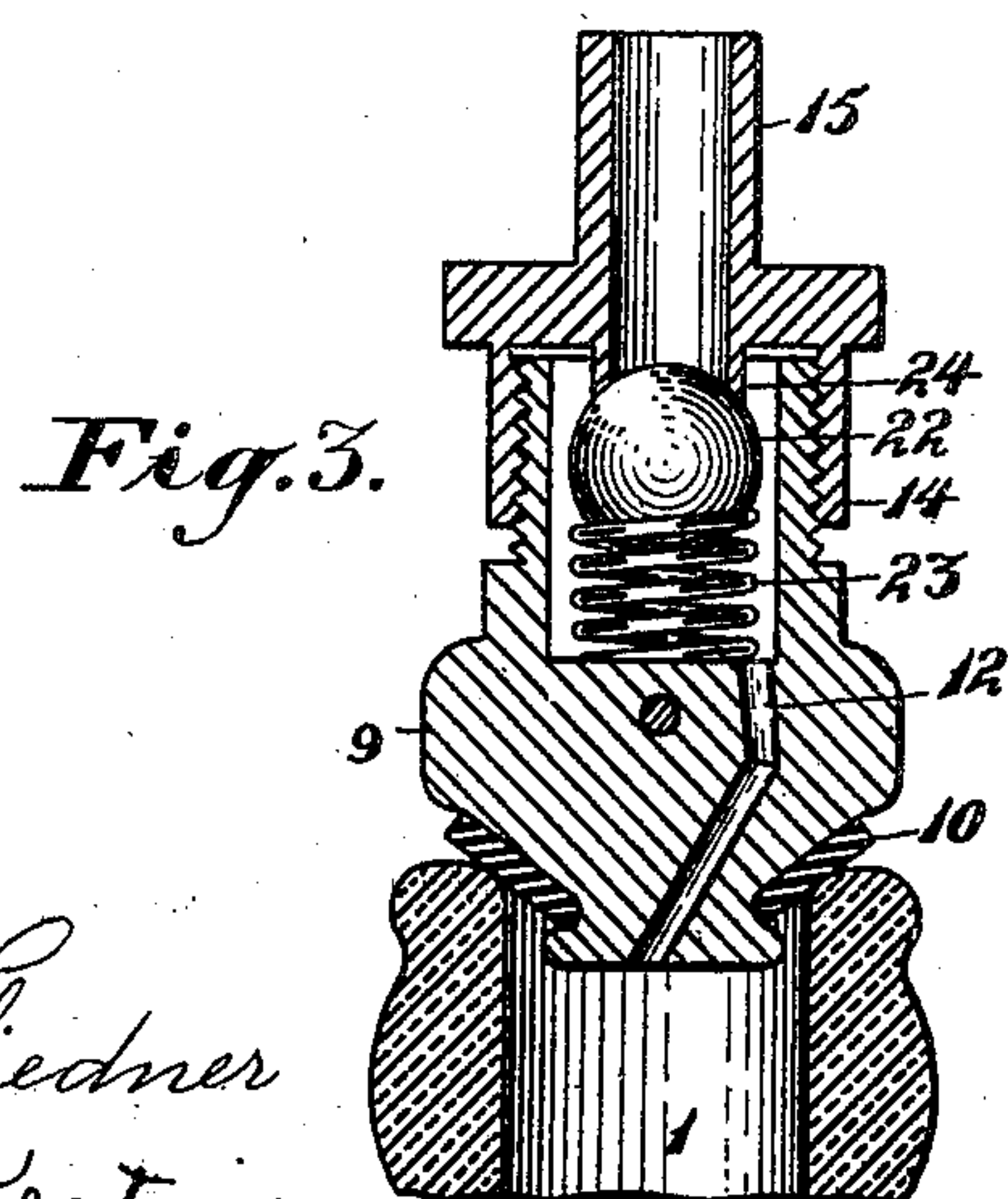
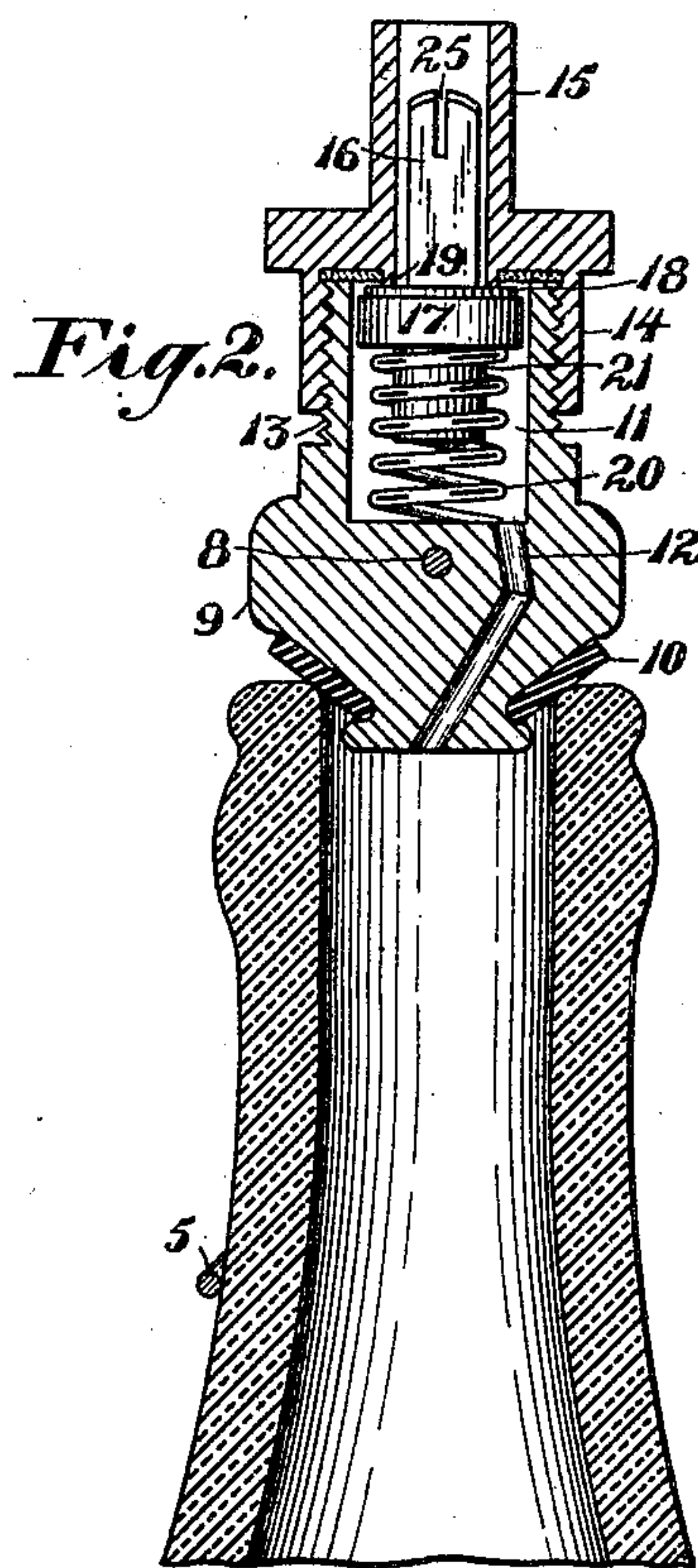
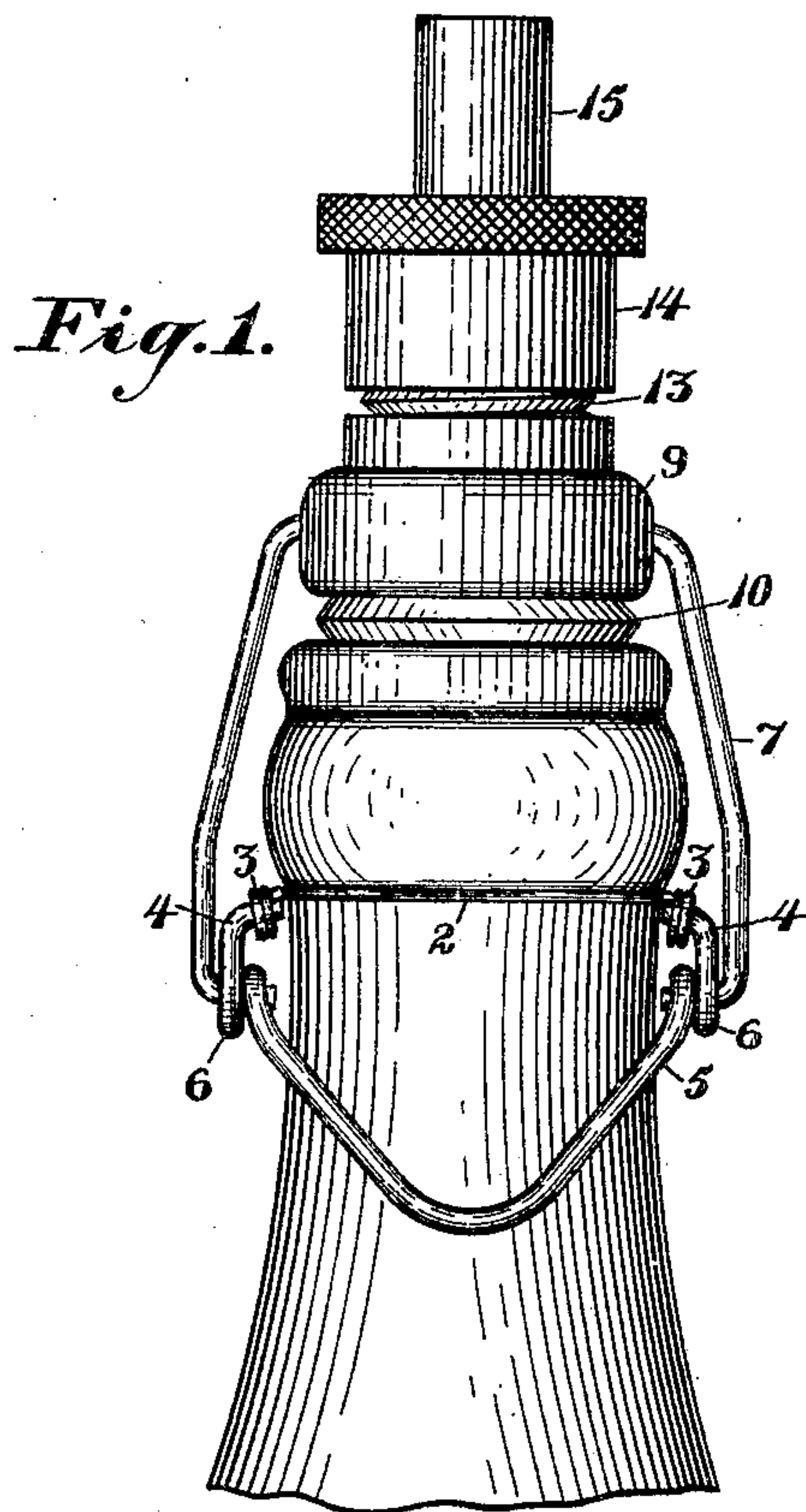


D. LANDAU.
STOPPER FOR BOTTLES CONTAINING AERATED LIQUIDS.
APPLICATION FILED NOV. 28, 1908.

922,158.

Patented May 18, 1909.



WITNESSES

J. C. Fiedner
Walter B. Keating

INVENTOR,
D. Landau,
BY
F. M. Wright,
ATTORNEY

UNITED STATES PATENT OFFICE.

DEWIS LANDAU, OF SAN FRANCISCO, CALIFORNIA.

STOPPER FOR BOTTLES CONTAINING AERATED LIQUIDS.

No. 922,158.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed November 28, 1908. Serial No. 464,866.

To all whom it may concern:

Be it known that I, DEWIS LANDAU, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Stoppers for Bottles Containing Aerated Liquids, of which the following is a specification.

The object of the present invention is to provide a stopper for bottles containing aerated liquids, by means of which such bottles may be charged with gas more conveniently and at less expense than heretofore.

In the accompanying drawing, Figure 1 is a front view of the stopper, a portion only of the bottle being shown; Fig. 2 is a vertical section of the same; Fig. 3 is a view, similar to Fig. 2, of a modified form of stopper.

Referring to the drawing, 1 indicates the neck of a bottle, upon which is secured a wire band 2, formed with loops 3, which serve as pivotal bearings for the ends 4 of a wire finger piece 5, the latter being formed with loops 6 serving as bearings for the ends of a yoke 7. Said yoke 7 passes through a transverse aperture 8 formed in a metallic stopper 9, in precisely the same way as with porcelain stoppers used with such yokes. The lower end of the stopper 9 is provided with a rubber washer 10, which fits upon the top of the neck of the bottle and makes a tight joint therewith, when the yoke is moved to its position closing the bottle. Said stopper is formed at the top with a cavity or socket 11, from which a conduit 12 leads downward through the stopper to the lower end thereof in order to supply the bottle with compressed gas. The wall of the socket 11 is externally threaded, as shown at 13, and upon the same is screwed a cap 14, having at the top a charging nozzle 15. Within the central aperture of said nozzle can slide a square upper stem 16 of a cylindrical valve 17, a disk 18 of rubber being supported upon said valve 17 and adapted to rest against a seat 19 formed by the lower end of the nozzle 15. A spring 20 surrounds the lower valve stem 21 and is contained within the socket 11 of the stopper.

In the modification shown in Fig. 3, instead of the valve 17, a ball valve 22 is used, supported by a light spring 23. However, in certain cases this spring may be dispensed with, and the pressure of the fluid contained in the bottle can be depended upon to hold

the ball valve 22 to its concave seat 24. The square upper stem of the valve is formed with a slit 25 to permit the compressed fluid to pass to the side of the upper stem 16. The parts of the stopper which come in contact with the liquid are made of block tin or any other suitable material which cannot affect the liquid in the bottle.

The particular form of charging nozzle here shown is old, and I herein lay no claim to the same, and it is to be understood that any form of charging nozzle may be used with my present invention.

To fill the bottle, the stopper is opened, the bottle is nearly filled with seltzer water and syrup, or with beer, or with any liquid that it may be desired to aerate. The stopper is then closed by means of the yoke 7 and the charging nozzle 15 is then applied to a charging outlet connected with a suitable source of supply of compressed gas, and the bottle is held until a sufficient amount of gas has entered. When the bottle is removed, the valve 17 or 22 immediately closes and prevents the further escape of fluid.

In use, the stopper is opened in the ordinary manner, and the contents poured out of the bottle.

By means of this contrivance the bottles do not have to be sent back to the factory to be filled or charged, but can be readily charged by the retailer with a small expenditure of time and labor, and at a minimum of expense. Consequently the cost to the retailer of these bottles is reduced to less than one-half of its former cost. Moreover no skilled labor is now required in operating the charging apparatus, as the bottles are readily charged by any person, however unskilled in the art.

The following are the advantages of the present construction. The yoke 7, passing through the stopper 9 at a height slightly above the washer 10, causes the stopper to fit tightly upon the neck of the bottle, so that there is no chance of leakage, and this will be the case notwithstanding considerable variation in the size of the opening of the bottle neck. Since the cap 14 can be readily removed from the stopper, the valve can be at all times kept perfectly clean, so that no leakage can take place.

I claim:—

The combination of a bottle, a finger piece, means for pivotally supporting said finger

piece upon the neck of the bottle, a yoke
pivotally connected to said finger piece, a
stopper, a rubber washer around the lower
end of the stopper, arranged to fit upon the
5 top of the neck of the bottle and to make a
tight joint therewith, said stopper being
formed at the top with a cavity, and the
yoke passing through said stopper below said
cavity, said stopper being also formed with a
10 conduit leading from said cavity to the
lower end of the stopper, a valve in said cav-

ity, a spring for raising said valve, and a cap
screwed upon said stopper, and having a
seat for said valve.

In testimony whereof I have hereunto set 15
my hand in the presence of two subscribing
witnesses.

DEWIS LANDAU.

Witnesses:

FRANCIS M. WRIGHT,
D. B. RICHARDS.