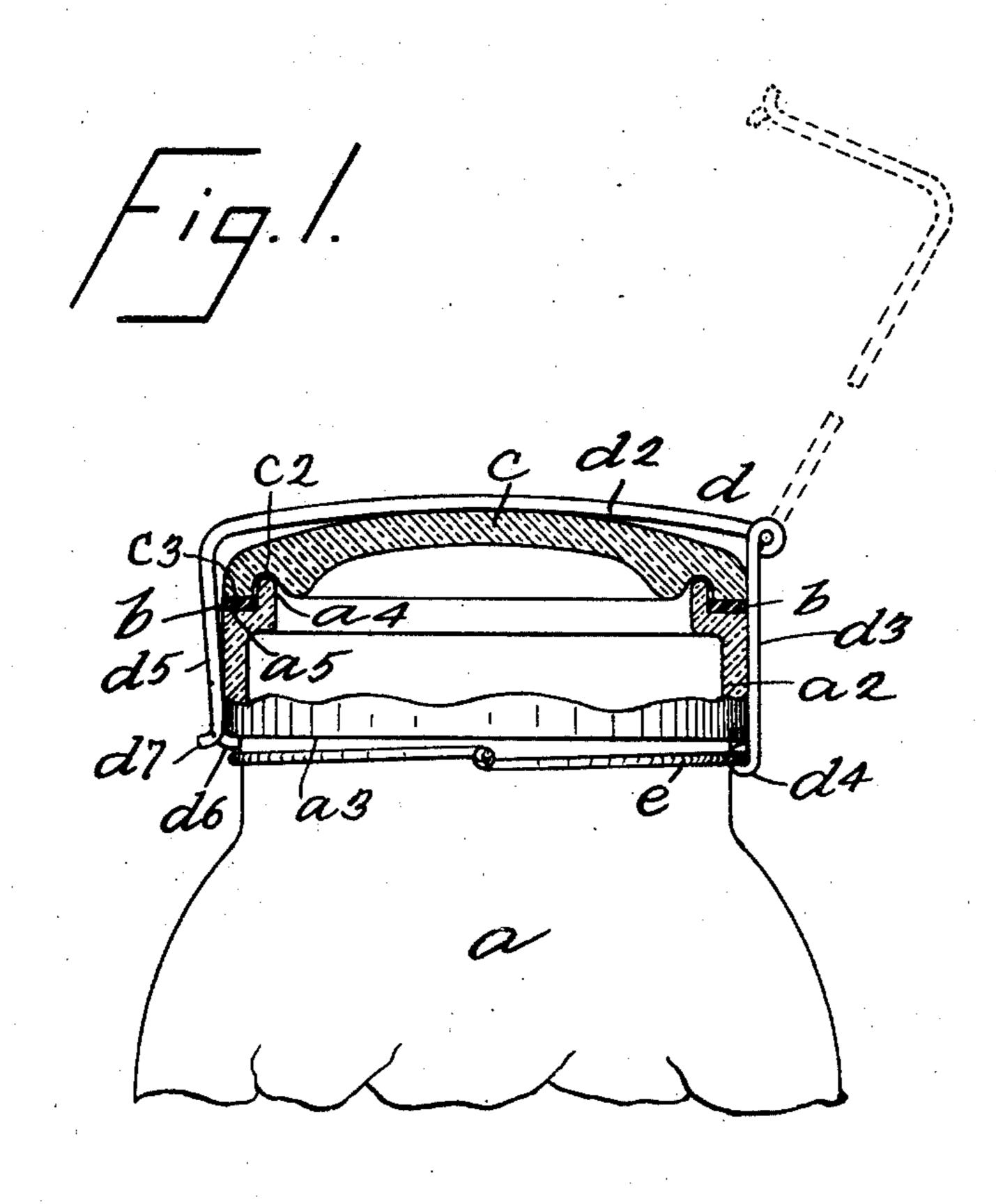
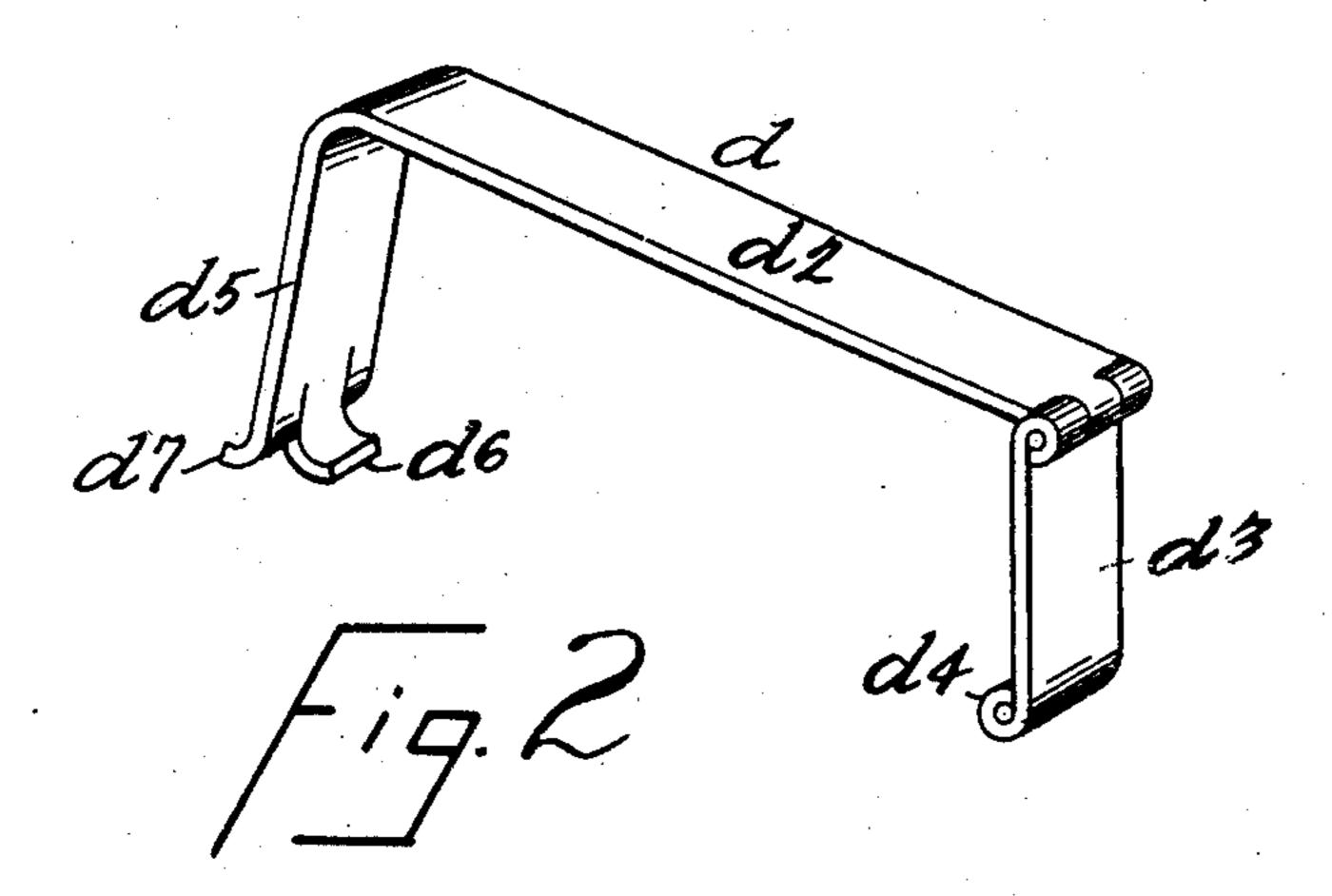
W. R. GREINER.

CLOSURE DEVICE FOR JARS AND OTHER VESSELS.

APPLICATION FILED AUG. 30, 1905.





WITNESSES H. Laseu Milliam P. Greiner

BY Edgar Salet Co

TED STATES PATENT OFFICE.

WILLIAM RUDOLPH GREINER, OF MARLBORO, NEW YORK.

CLOSURE DEVICE FOR JARS AND OTHER VESSELS.

No. 827,096.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed August 30, 1905. Serial No. 276,339.

siding at Marlboro, in the county of Ulster 5 and State of New York, have invented certain new and useful Improvements in Closure Devices for Jars and other Vessels, of which the following is a specification, such as will enable those skilled in the art to which it ap-10 pertains to make and use the same.

This invention relates to closure devices for jars, bottles, and similar vessels; and the object thereof is to provide an improved device of this class which is particularly adapt-15 ed for closing fruit-jars and similar vessels, but which may also be employed for closing bottles such as beer-bottles and other bottles designed for holding effervescent water.

The invention is fully disclosed in the fol-20 lowing specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of the top part of an ordinary fruit-jar provided with my improved closure device, and Fig. 2 a perspective view of a part of the closure device.

In the drawings forming part of this speci-30 fication I have shown at a an ordinary fruitjar provided with a neck a^2 , below the top of which is an annular bead or shoulder a^3 , and the top of said neck is provided with an inwardly-set and upwardly-directed annular 35 flange or rim a^4 , which forms an annular shoulder a^5 , on which is placed a packingring or gasket b.

The cap or cover c is provided in the under side of the outer portion thereof with an an-40 nular groove c^2 , which receives the flange or rim a^4 when the cap or cover is in position, and outside of said groove is a depending annular portion c^3 , which rests on the packingring or gasket b. The central top of the cap 45 or cover c is also convex or raised, as shown in Fig. 1, and in the practice of my invention I provide a locking attachment for securing the cap or cover c in place, which comprises a strong spring-clamp d, composed of a hori-50 zontal top portion d^2 , hinged at one end to a depending member d^3 , provided at its outer end with a fold forming an eye d^4 , through which is passed a binder-wire or similar device e, which is secured around the neck of 55 the jar below the annular bead or shoulder a^3 , and the free end of the horizontal top portion

To all whom it may concern:

Be it known that I, William Rudolph Greiner, a citizen of the United States, re
d² of the spring-clamp d is provided with a depending arm d⁵, having at its lower end an inwardly-directed hook or projection d⁶, which when the spring-clamp d or the free 60 end thereof is forced downwardly, as shown in Fig. 1, passes beneath the annular bead or shoulder a^3 of the neck of the jar and securely locks the cap or cover c in position. The depending arm d^5 of the spring-clamp d is 65 also preferably provided at its lower end with an outwardly-directed finger portion or handle-piece d^7 , by means of which the lower end of the arm d^5 may be forced outwardly or pulled outwardly in the operation of opening 70 the jar, or, if desired, a knife-blade or similar device may be forced between said arm and the neck of the jar in order to accomplish the opening thereof.

> The spring-clamp d is made of any suitable 75 spring material, and when the free end thereof is forced downwardly the free end of the arm d^5 or the hook d^6 thereof bears on the side of the neck of the jar and exerts considerable pressure thereon, and when the free end of 80 the spring-clamp d is forced low enough the hook d^6 springs into position beneath the annular bead or shoulder a³, and the cap or cover c is securely locked in place and is securely held and pressed on the packing-ring 85 or gasket b, and the hook d^6 can only be detached from the bead or shoulder a^3 in the manner herein described, and no amount of handling the jar will result in the accidental disconnection of the said hook from the bead 90 or shoulder a^3 .

Although I have shown my improvement applied for the purpose of closing a jar, it will be apparent that a beer-bottle or similar vessel or a jug or similar vessel may be closed in 95 the same manner, and for this purpose it is not necessary to make the top of the neck of the vessel and the bottom of the cap or cover. exactly of the form herein shown and described, as all that is necessary is to provide a 100 cap or cover which will fit the top of the vessel and between which and said top a packingring or gasket can be placed, and it will also be apparent that in order to insure a perfect operation of my improved closure device the 105 top of the cap or cover should be formed in such manner that the central portion of the part d^2 of the spring-clamp d will rest thereon.

Having fully described my invention, what I claim as new, and desire to secure by Let- 110 ters Patent, is—

A jar or other vessel having a neck pro-

•

vided below the top thereof with an annular shoulder, a cap or cover adapted to be secured on said neck and to close the vessel, a band secured around the neck below the annular shoulder and a cover-securing device comprising a link connected with said band at one side of said neck, and a transversely-arranged spring-clamp device one end of which is connected with said link and the other end of which is provided with a depending spring member adapted to engage

said shoulder, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 28th day of August, 1905.

WILLIAM RUDOLPH GREINER.

Witnesses:

CHARLES A. HARTSHORN, JAMES F. BENNETT.