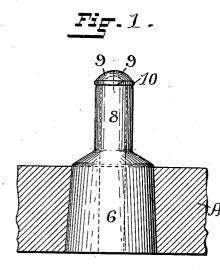
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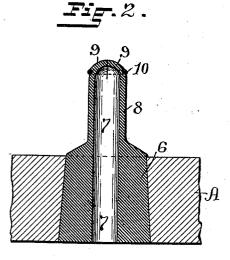
# P. J. LAYDEN. BUNG.

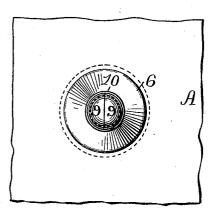
No. 512,832.

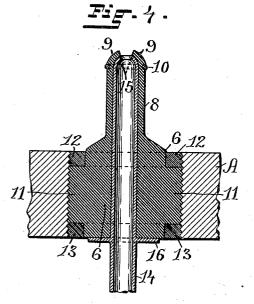
Patented Jan. 16, 1894.











WINESSES.

Huny J. Miller Chas. H. Luther for

INVENIOF: Patrick J. Xayden Joseph Miller Heo.

E NATIONAL LITHOGRAPHING COMPANY, WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

## PATRICK J. LAYDEN, OF PROVIDENCE, RHODE ISLAND.

#### BUNG.

## SPECIFICATION forming part of Letters Patent No. 512,832, dated January 16, 1894. Application filed November 14, 1893. Serial No. 490,909. (No model.)

#### To all whom it may concern:

Be it known that I, PATRICK J. LAYDEN, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Bungs; and I hereby declare that the following is a full,

clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in bungs for barrels and in a faucet, or connection, adapted to be secured therein.

The object of the invention is to so construct the bung that its inner end will serve

as a valve adapted to be opened by the inser-15 tion of the faucet-stem, or shank, and to be automatically closed upon the withdrawal of the faucet-stem.

Another object of the invention is to simplify the construction and to increase the ef-20 fectiveness of a faucet-bung.

The invention consists in the peculiar construction of a bung, formed of semi-elastic material, having an automatic valve at its in-

25 ner end, and the combination therewith of a faucet-stem adapted to open the valve and to be held in place by contraction of the material of the bung on to the stem.

The invention also consists in such other 30 novel features of construction and combination of parts as may hereinafter be more fully described and pointed out in the claims.

Figure 1 represents an elevation of one form of the bung secured in a portion of a barrel-

35 head. Fig. 2 represents a vertical sectional view of the same, Fig. 3 being a view looking toward the inner end of the bung. Fig. 4 represents a vertical sectional view of a modified form of the bung and of a portion of the 40 faucet-stem secured therein.

Similar numbers and letters of reference designate corresponding parts throughout.

In faucet-bungs for barrels it is desirable that the construction of the bung be as sim-

- 45 ple as possible and the securing of the faucet thereto be attended with few movements. Therefore, in carrying my invention into practice I construct a bung of elastic or semielastic material, generally of rubber which is
- partially vulcanized after the bung is completed. The bung is formed in one piece | rial, having an enlarged perforated base, a

having an enlarged base 6 axially perforated as at 7 and furnished with a tapering outer surface. Above the base the material is contracted to form a neck 8 into which the per- 55 foration or bore 7 is continued, the upper end of the neck 8 having inwardly-turned lips 9-9 which tend to close together from the elasticity of the material and from the contracting pressure of the ring 10 formed gen- 60 erally of spring metal and partially embedded in an annular concavity in the end of the neck slightly beyond the lower ends of the slit which separates the two lips 9-9.

The construction shown in Figs. 1, 2 and 3 65 is adapted to fit a tapering hole in the head A of a barrel being held in place by the expansion of the base 6 when it is desired to more securely fasten the bung in place.

I provide the base with a screw-threaded ex- 70 tension 11 above and below which the material of the base is shaped to receive the screwrings 12 and 13. When it is desired to secure this modified form of the bung in the barrel a screw-threaded hole is first prepared, the 75 diameter of the hole corresponding with that of the shoulder 11 and the rings 12 and 13. The ring 12 is now screwed into the hole, then the bung and finally the ring 13 which slightly compresses the shoulder 11 endwise 80 and causes it to increase in diameter, thus firmly securing the bung in place.

The faucet used with this bung is provided with a tubular stem or shank 14 having a convex top 15, furnished with an inlet, and at a 85 distance from this outlet, equal to the length of the bung, is secured the stop-plate 16. As this stem is forced into the end of the neck 8 its convex top 15 entering between the lips 9-9 separates the same and opens a passage 90 for the contents of the barrel. The stem 14 at the same time is firmly embraced by the elastic walls of the bore 7 holding the faucet in place. When the faucet is withdrawn the lips 9-9 close together and prevent the es- 95 cape of the barrel's contents, the pressure in the barrel tending to assist this closing.

Having thus described my invention, I claim as new and desire to secure by Letters Patent-

1. A barrel-bung, formed of elastic mate-

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contracted neck extending from the base, and inwardly-turned lips closing the end of the neck, as described.

2. In a barrel-bung, the combination with 5 a semi-elastic enlarged base having a central bore, and an elastic neck, extending from said base and forming an extension for the bore, having a convex top separated by a cross slit into two lips, of a ring formed of spring metal re surrounding the base of said convex top, as described.

3. The combination with the base 6 having the threaded extension 11 and a central bore,

the elastic neck 8 extending from the base and having the closing lips 9—9, the ring 10 15 surrounding the end portion of the neck, and the securing-rings 12 and 13, of a faucet provided with the tubular-stem 14 having the convex perforatad end 15 and the stop-plate 16, as and for the purpose described. 20

In witness whereof I have hereunto set my hand.

PATRICK J. LAYDEN.

Witnesses:

JOSEPH A. MILLER, Jr., M. F. BLIGH.

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