

(No Model.)

C. SCHOPF.
BUNG.

No. 533,181.

Patented Jan. 29, 1895.

Fig. 4.

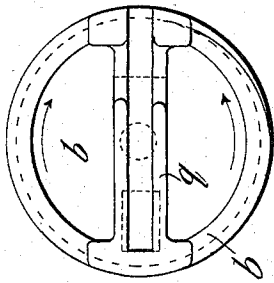


Fig. 5.

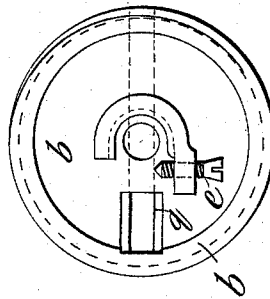


Fig. 2.

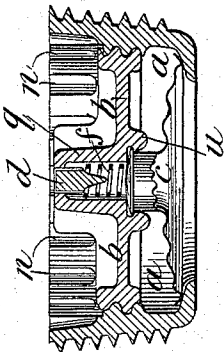


Fig. 6.

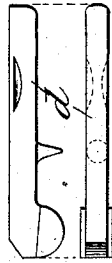


Fig. 1.

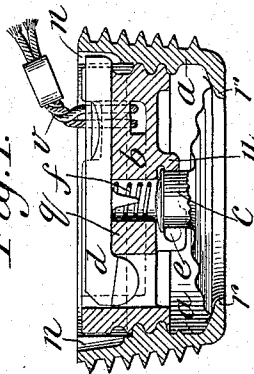
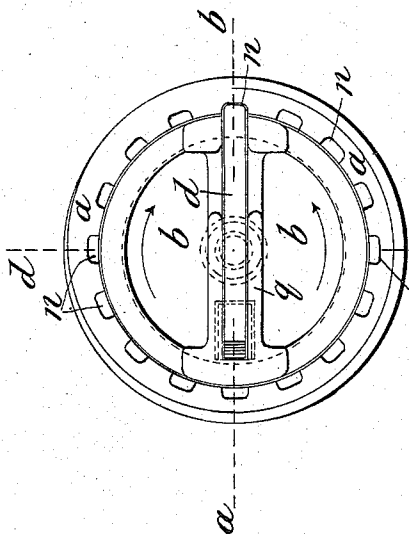


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

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SPECIFICATION forming part of Letters Patent No. 533,181, dated January 29, 1895.

Application filed October 10, 1894. Serial No. 525,528. (No model.)

To all whom it may concern:

Be it known that I, CARL SCHOPF, a citizen of Germany, residing at Munich, Bavaria, Germany, have invented certain new and useful Improvements in Bungs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in bungs.

The object of my invention is to produce a hermetic sealing device for barrels by means of a spring pressure-plate, which rests upon an inner edge or flange of the bung bushing and is pressed against the same by the bung. The latter is operated, for this purpose, either by hand or with the aid of a suitable implement. The bung may be provided with a lead seal for custom house purposes, through the medium of a cross piece which is adapted to engage the notches in the bung bushing.

The invention consists in such features, details of construction and combination of parts as will first be described in connection with the accompanying drawings and then particularly pointed out in the claims.

In the drawings—Figure 1 is a diametrical section of a device embodying my invention, taken on the line *a-b*, Fig. 3. Fig. 2 is a similar view taken at right angles to Fig. 1, on the line *c-d*, Fig. 3. Fig. 3 is a plan view. Fig. 4 is a top plan view of the bung proper. Fig. 5 is a bottom plan view of the same. Fig. 6 shows a plan and side elevation of the locking lever.

Referring to the drawings, it will be seen that the bung bushing, *a*, is provided at its exterior with a conical screw thread and is screwed into the barrel in a well known manner. The inner surface of the said bushing is, at its upper portion and on its entire periphery, provided with a large number of notches, *n*, which play a part in the sealing of the receptacle for custom house purposes. Below these notches, the bushing is provided with an interior screw thread for receiving the bung, *b*. (See Fig. 4.) The lower rim of the bushing is provided with an inward-extending obtuse-angled surrounding annular flange, *r*, upon which the pressure plate, *c*, (Fig. 5,) rests.

The upper part of the bung, *b*, is provided

with a cross bridge, *g*, having a countersunk locking-lever, *d*, (Fig. 6,) actuated by a spring, *f*, while the lower part of the said bung is provided with an open swivel-socket, preferably in the form of a U-shaped projection, *u*. (See Fig. 5.) In this socket, which is open at one part, is inserted the swivel shank of a spring plate, *e*, which is removably held in the open socket by any suitable means, in the present instance by a small set screw, *e*. (See Figs. 1 and 5.) By this construction, the plate is readily removed for the purpose of cleaning, or replacing it when broken or worn out.

By moderately screwing forward the bung, *b*, the yielding circumference or edge of the spring pressure plate, *c*, is pressed against the surrounding annular flange, *r*, of the bung bushing, whereby the hermetic sealing is effected through the medium of a packing of paper or the like placed between *b* and *r*. The sealing for custom house purposes is effected by the lever, *d*, which is let into the transverse bridge, *g*, of the bung, and which, in its lowermost or folded down position, engages one of the notches, *n*, of the bung bushing. In this position, it is retained by means of a wire or similar securing device, which passes through a perforation, *h*, of the bridge, *g*, and whose ends are secured by means of a lead seal. In an unsealed condition, the spring, *f*, holds the free end of the lever, *d*, in a raised position, so that the same may be used as a handle to be grasped in applying or removing the bung.

If the bung lock is used for purposes other than those involving sealing for custom house purposes, the lever, *d*, and spring, *f*, may be dispensed with and the bridge, *g*, made solid.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a bung bushing, of a bung secured inside the bushing, and a spring plate swiveled to the bung and having a yielding circumference adapted to yieldingly contact with the bung bushing on the line of closure.

2. The combination, with a bung bushing having a surrounding inner flange, of a bung secured inside the bushing, and a spring plate swiveled to the bung and having a yield-

ing circumference adapted to normally bear against the flange, substantially as set forth.

3. The combination, with a bung bushing having an annular flange, of a bung threaded into the bushing, means for rotating the bung, and a spring plate swiveled to the bung and having a yielding circumference arranged to bear yieldingly against the flange when the bung is screwed into the bushing, substantially as set forth.

4. The combination, with a bung bushing, and a bung secured inside the bushing and provided with an open swivel-socket, of a plate provided with a swivel-shank seated in the said socket, and removable means for holding the swivel-shank in the open socket, substantially as set forth.

5. The combination, with a bung bushing, and a bung secured inside the bushing and provided at its inner end with a U-shaped projection, of a plate having a shank at its outer end engaging the U-shaped projection, and a screw passing through the U-shaped projection and engaging the shank on the plate, substantially as set forth.

6. The combination, with a bushing, and a bung threaded into the bushing and provided at its inner end with a U-shaped projection, of a spring plate having a shank located in the U-shaped projection, and a screw threaded into the U-shaped projection and engaging the shank on the spring plate, substantially as set forth.

7. The combination, with a bung bushing provided with a series of notches on its interior surface, of a bung secured within the bushing, and a lever attached to the bung and arranged to engage any one of the notches, substantially as set forth.

8. The combination, with a bung bushing provided with a series of notches on its interior surface, and with an internal screw thread, of a bung threaded exteriorly for engagement with the internal threads of the bushing, and a lever attached to the bung and arranged to engage any one of the notches in the bushing, substantially as set forth.

9. The combination, with a bung bushing, of a bung having a transverse bridge-piece

provided with a central recess, a spring located in said recess, and a lever pivoted to one end of the bridge-piece and provided with a stud arranged to bear on the spring, the free end of said lever engaging the bushing, substantially as set forth.

10. The combination, with a bung bushing, of a bung having a transverse bridge-piece provided with a central recess, a spring located in said recess, a lever pivoted to one end of the bridge-piece and provided with a stud arranged to bear on the spring, the free end of said lever engaging the bushing, and a seal device securing the lever, substantially as set forth.

11. The combination, with a bung bushing having notches, of a bung located within the bushing and provided with a transverse bridge piece having a recess, a locking lever located in said recess and arranged to engage any one of the notches in the bushing, and a spring carried by the bridge piece and bearing against the locking lever, substantially as set forth.

12. The combination, with a bung bushing having a flange and notches, of a bung threaded into the bushing, a locking lever attached to the bung and arranged to engage any one of the notches, a spring pressure-plate carried by the bung and normally pressed against the flanges of the bushing, and a seal device attached to the lever and to the bung, substantially as set forth.

13. The combination, with a bung bushing provided with notches, of a bung threaded into the bushing and provided with a transverse bridge piece having a hole through it, a locking lever attached to the bridge piece and arranged to engage any one of the notches in the bushing, and a seal device passing through the hole in the bridge piece and around the locking lever, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CARL SCHOPF.

Witnesses:

EMIL HENZEL,

WILHELM SANNY.