

(No Model.)

M. FISCHER.
METALLIC BUNG.

No. 531,791.

Patented Jan. 1, 1895.

Fig. 1.

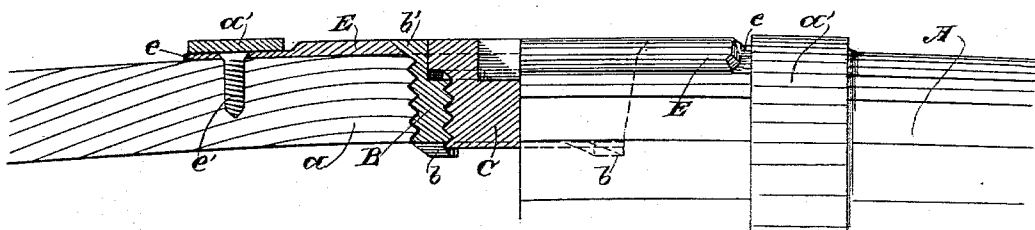


Fig. 2.

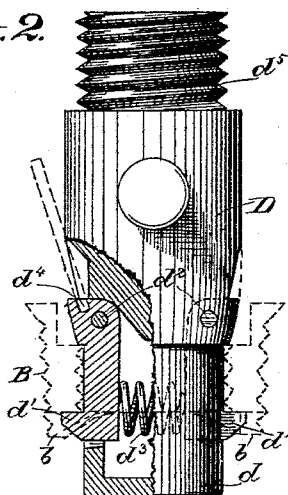
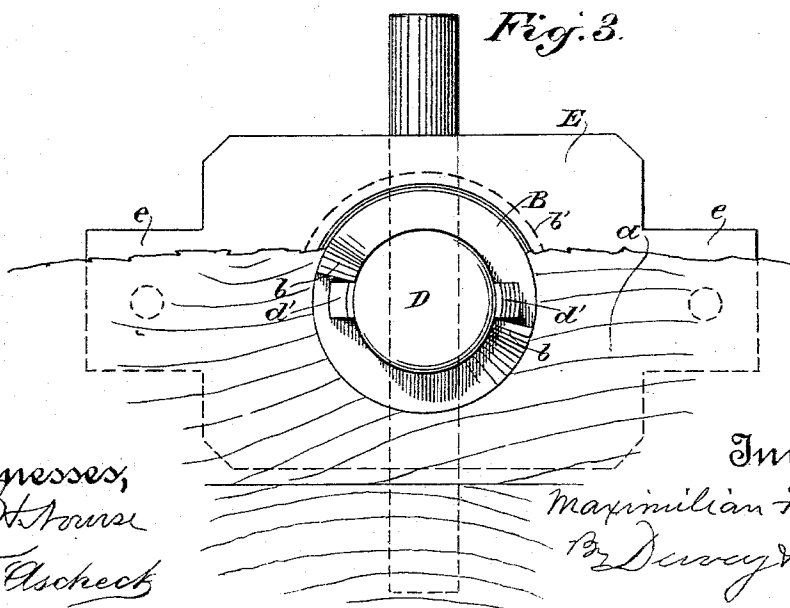


Fig. 3.



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UNITED STATES PATENT OFFICE.

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METALLIC BUNG.

SPECIFICATION forming part of Letters Patent No. 531,791, dated January 1, 1895.

Application filed September 13, 1894. Serial No. 522,940. (No model.)

To all whom it may concern:

Be it known that I, MAXIMILIAN FISCHER, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Metallic Bungs; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of metallic bungs in which the bushing which receives the bung is, itself, screwed into the stave of the keg, cask, barrel or other vessel.

My invention consists of the constructions and combinations of parts which I shall hereinafter fully describe and claim.

A disadvantage of the ordinary bung is that having to make a hole of large diameter in as narrow a limit as a stave affords, materially weakens the stave, in the absence of any protecting plate such as my invention contemplates. The rolling around of the keg, its pressure against its neighbor and the rough handling it receives in general, all tend to injure the stave around the bung; and this tendency increases, in many instances, even to the cracking of the bung stave on each side of the bung, and the consequent leaking of the keg and spoiling of its contents, as by the escape of the gas from steam beer.

My invention remedies all these objections and disadvantages, first, by providing a bung bushing which is adapted by the use of a wrench, made for the purpose, to be both inserted and removed with facility, and, second, by providing a protecting plate for the bung stave.

My invention, therefore, consists in a bung bushing having on its inner edge suitable lugs for the engagement of the jaws of an insertible wrench, whereby said bushing may be easily removed; a wrench having expansible and contractible jaws adapted to engage the lugs of the bushing to unscrew it, said wrench having also a threaded stem for engaging and screwing the bushing into place; and, finally, a protecting plate to lie upon the bung stave about the bung hole therein, said plate being secured by the bung bushing, by the hoops of the keg and by screws, all as I shall now proceed to describe by reference to the accom-

panying drawings which illustrate my invention.

Figure 1 is a part section and part elevation, showing the bung in place and the application of the protecting plate E to the bung stave *a*. Fig. 2 is a view of the wrench D, its end *d* being in partial section. Fig. 3 is a view of the inner end of the bung bushing showing the engagement of the jaws *d'* of the wrench with lugs *b* of said bushing, and also showing the protecting plate on the outside of the bung stave.

A is a part of a keg or other like vessel. Its bung stave *a* has the usual bung hole made in it.

B is my bung bushing. It consists of a ring exteriorly threaded, to adapt it to be screwed into the bung hole. It is interiorly shouldered and threaded to receive the usual bung C. The inner edge of the bushing is formed or provided with the lugs *b*, and its outer edge is flanged at *b'*.

D is a wrench, one end *d* being formed so that it will pass easily through the bushing B. Into this end are let jaws *d'* which project normally from the surface of the end. The shanks of these jaws are pivoted on pins *d²*, and they are controlled by springs *d³*, which hold them outwardly. The jaws are beveled on their faces, so that when the end *d* of the wrench is forced into the bung bushing, the jaws will yield inwardly and swing down flush with the end *d*, thereby allowing the latter to pass through the bushing. When the jaws are clear of the bushing they spring out again behind it, and engage the lugs *b* on the inner edge of said bushing. Then by turning the wrench, the bushing will be unscrewed and removed from the stave. If, by chance, the wrench should be inserted when it was not the intention to remove the bushing, then, in order to remove the wrench alone, the outer end of the jaw shanks need only be raised, in order to withdraw or contract the jaws, to permit the wrench to slip out from the bushing. This movement of the jaws can be effected in any suitable manner. I have here shown the ends of the jaw shanks provided with small sockets *d⁴* exposed to the entrance of a suitable tool whereby said ends may be

lifted. The other end of the wrench has a threaded stem d^3 which upon being screwed into the bushing, will serve as a means of screwing the latter into its place in the bung stave.

E is the protecting plate. It is shaped to lie flat upon the bung stave, about the bung hole. It is secured in place firmly by three connections.

10 The flange b' of the bung bushing is seated in its central aperture, and when the bushing is screwed home, it draws the plate down snugly and tightly. The plate has ears e for the reception of screws e' , and these ears are 15 long enough to lie under and to be secured by the hoops a' of the keg. Thus, while the plate is so firmly secured, it is easily removable. When in place, it protects the bung stave from all the injuries to which it is liable 20 and strengthens it.

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

1. The combination, with a bung, of a bushing therefor adapted to be fitted in the bung hole of the keg or vessel, having its upper end provided with an outwardly extending flange beveled on its under side, and a separate protecting plate of a size adapting its 30 outer ends to be embraced by the hoops of the keg or vessel, and having a central opening

for the bushing, said opening having a beveled wall adapted to be passed under the beveled flange of the bushing, and to be held securely thereby with the upper surface of the plate flush with the top of the bushing. 35

2. The combination, of a bushing adapted to be screwed into the bung hole, having its interior threaded, its bottom or inner edge provided with lugs adapted for engagement 40 with a wrench or tool, and its upper end provided with a beveled face flange; a bung adapted to be screwed into said bushing, and a protecting plate about the bung hole, said plate being independent of the bushing, hav- 45 ing ears extending from its outer sides adapted to be secured to the keg or vessel and to be embraced by the hoops thereof, and having a central opening for the bushing said opening having a beveled wall adapted to fit 50 under the flange of the bushing whereby when the bushing is screwed into position its flange engages the beveled wall of the plate to draw the plate firmly to its seat upon the keg or vessel and form a flush joint. 55

In witness whereof I have hereunto set my hand.

MAXIMILIAN FISCHER.

Witnesses:

S. H. NOURSE,

H. F. ASCHECK.