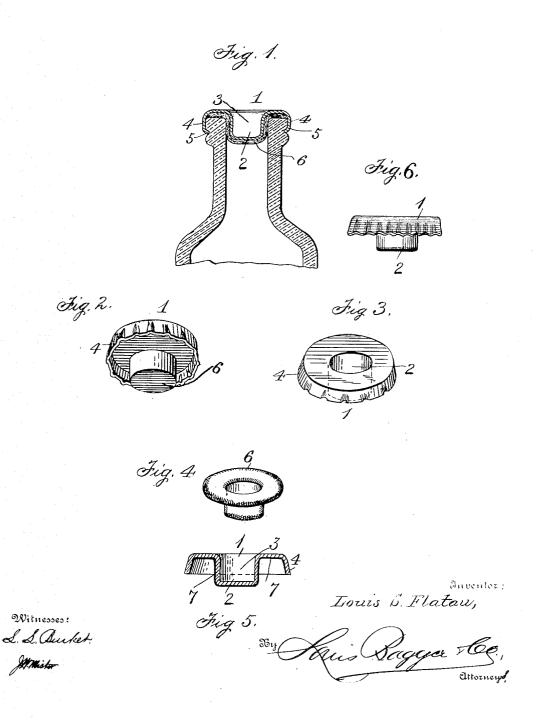
No. 887,619.

PATENTED MAY 12, 1908.

L. S. FLATAU.
BOTTLE STOPPER.
APPLICATION FILED NOV. 5, 1906. RENEWED OUT. 23, 1907.



## UNITED STATES PATENT OFFICE.

LOUIS S. FLATAU, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO JOHN P. GRUET, JR., OF ST. LOUIS, MISSOURI.

## BOTTLE-STOPPER.

No. 887,619.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed November 5, 1906, Serial No. 342,096. Renewed October 23, 1907. Serial No. 398,802.

To all whom it may concern:

Be it known that I, Louis S. Flatau, a citizen of the United States, residing at St. Louis, State of Missouri, have invented a certain new and useful Improvement in Bottle-Stoppers, of which the following is a specification.

My invention relates to improvements in

bottle stoppers.

Its objects are to effectively guard against the leakage or loss of the bottle-contents; to provide for the ready application of the stopper to the bottle; and to accomplish these ends in a simple, expeditious manner and at

15 the minimum expense.

Said invention consists of a stopper adapted to be crimped or secured to the outside of the bottle-neck and to fit into the neck for stoppering the bottle against the loss of its contents by leakage, substantially as hereinafter more fully disclosed and specifically pointed out by the claims.

In the accompanying drawing illustrating the preferred embodiment of my invention—
25 Figure 1 is a broken sectional view of a bottleneck with said invention applied thereto.
Fig. 2 is a detached perspective view of the
stopper looking at it from an angle disclosing
more particularly its interior. Fig. 3 is a
30 like view thereof viewing it at an angle show-

like view thereof viewing it at an angle showing more especially its top surface. Fig. 4 is a separate view of the stopper-lining. Fig. 5 is a sectional view showing the stopper with a rubber lining. Fig. 6 is a side elevation of the cap constructed according to the pre-

ferred form of the invention.

In the disclosure of my invention, I make the stopper 1, principally from metal, preferably tin, the same being formed with a

erably tin, the same being formed with a 40 central inward-extension, or teat 2 forming the stopper proper, the resultant of which is an outward facing depression 3, which, however, is only incidental being due to the thin character of the metal used. Said teat or 45 extension, produced or formed by "draw-

5 extension, produced or formed by "drawing" or stamping the metal with the use of suitable dies, is of such cross-sectional area or outline as to enable it, with its lining or packing presently described, applied thereto, to fit

ing presently described, applied thereto, to fit tightly in the bottle-neck. The stopper has its marginal or outward and downward extending portion 4 adapted to fit around the outside of the bottle-neck and crimped into effective position under the usual bead of the bottle-neck.

As above noted, I suitably apply to the stopper, a lining 6, which is adapted to adhere fixedly thereto and to have contact with both the outer or upper edge of the bottleneck as well as to fit against the inner surface 60 of the latter, after the usual bottle-stopper fashion, to provide for packing or sealing the same at all points where leakage would otherwise be likely to occur. Said lining or packing is formed preferably from pulp or 65 felt of preferably quite light color which is saturated or treated with paraffin, to render said lining or packing impervious to said liquid-contents, to thus provide for the tight-fitting of the same and effectively guarding 70 against leakage or loss of the bottle-contents at that point.

In lieu of the paraffin-treated or saturated pulp or felt lining 6, I may apply to the stopper 1, including its teat or extension 2, a lin-75 ing 7 formed from rubber which, in the case of bottling beer, would not only be proof against, but be advantageously affected by the heat retained in the latter from the pasteurizing process through which it is usually 80 passed for bottling, in that the rubber would become vulcanized thereby and thus form an

absolute seal at that point.

I claim-

1. A bottle-stopper of the character described, formed of two adhering layers of material, the upper layer being of metal and the inner layer or lining being of a character unobjectionable for contact with, and impervious to the bottle-contents, said layers of masserial being conformed to depend within and fit the interior of the bottle-neck and to overlie its top edge, the outer metal layer also being crimped down upon the outside thereof.

ing crimped down upon the outside thereof.

2. A bottle-stopper of the character described, formed of two adhering layers of material, the upper layer being of metal and the
inner layer or lining being of pulp, and the
same being conformed to depend within and
fit the interior of the bottle-neck, and to over100
lie its top edge, the outer metal layer also being crimped down upon the outside thereof

as set forth.

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

LOUIS S. FLATAU.

Witnesses:

H. M. Morehouse, T. J. Hurley.