

(No Model.)

W. T. GILBERT.
CAR SEAL.

No. 573,145.

Patented Dec. 15, 1896.

Fig. 1.

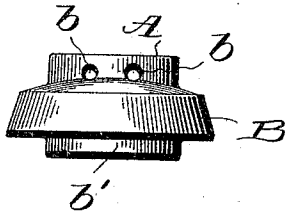


Fig. 2.

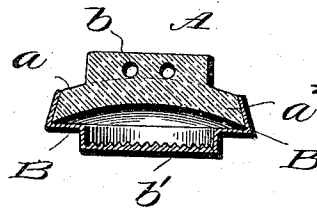


Fig. 3.

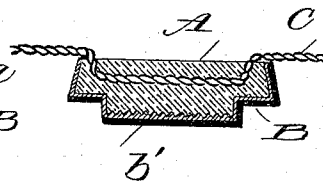


Fig. 4.

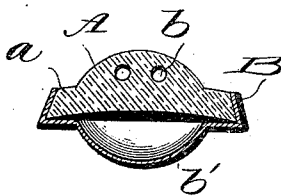


Fig. 5.

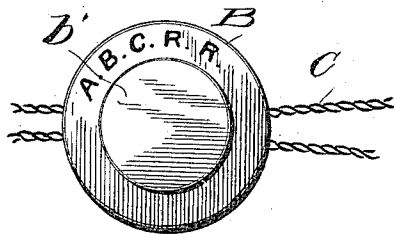
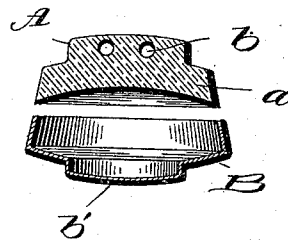
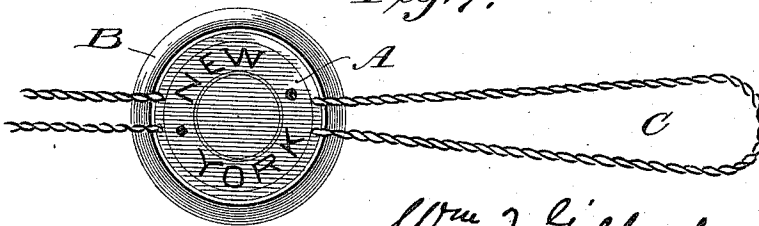


Fig. 6.

Fig. 7.



Witnesses:
L. C. Hills.
N. Curtis Lammond

Wm. J. Gilbert
Inventor:
By J. M. Curtis
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM THURSTON GILBERT, OF BROOKLYN, NEW YORK.

CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 573,145, dated December 15, 1896.

Application filed July 18, 1896. Serial No. 599,713. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM THURSTON GILBERT, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Car-Seals; 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 certain new and useful improvements in car-seals, and particularly to that class shown in Letters Patent No. 481,338, granted to F. W. Brooks on the 23d day of August, 1892. The seal described in the above-named Letters Patent involves a sheet-metal cup with converging walls, a soft-metal plug, and a bail-wire threaded through holes in the wall of the sheet-metal cup.

The object of my invention is to simplify the construction and to reduce the cost of manufacture of that type of seals; and it consists in constructing the soft-metal plug in hat form with diametric channels or passages to receive the bail-wire and forming the sheet-metal cup with converging walls and a countersink or depression adapted to receive the metal constituting the crown of the soft-metal plug when it is displaced by compression in the act of sealing, all as will be hereinafter more fully set forth.

In order that those skilled in the art may fully understand my invention, I will proceed to describe the construction and mode of using the same, referring by letters to the accompanying drawings, in which—

Figure 1 is an edge view of a seal embodying my invention with the bail-wire removed and as it appears before compression of the soft-metal plug. Fig. 2 is a central vertical section of the same. Fig. 3 is a similar section showing the relation of the parts after compression by an ordinary sealing-press. Fig. 4 is a side or edge view showing a modification in the design of the sheet-metal cup and the soft-metal plug. Fig. 5 is a similar view of soft-metal plug and sheet-metal cup of another form. Fig. 6 is a bottom view of the sheet-metal cup, and Fig. 7 is a top view of the seal after compression and with the wire bail in position.

Similar letters of reference denote like parts in the several figures of the drawings.

A represents a soft-metal plug having a central raised crown portion and a projecting circular rim *a*. The plug is formed with diametric bail-wire passages *b*, located at the point of juncture between the crown and rim, as most clearly shown at Fig. 2, and these passages may be in parallelism or may intersect or cross each other.

B is a sheet-metal cup having a converging side wall and with the bottom depressed or countersunk, as seen at *b'*, the said countersink being so proportioned that when pressure is applied to the crown of the soft-metal plug and the metal constituting the crown is displaced and forced downwardly the countersink or depression in the cup B will receive and accommodate the said displaced metal, thus leaving the upper surface of the plug comparatively flat and exhibiting any special figures or characters which may be designed upon the face of the press-die, as shown at Figs. 3 and 6.

The bail-wire C, as will be obvious, is threaded horizontally and in a plane coincident with the top of the annular converging wall of the sheet-metal cup, and when the crown of the soft-metal plug is crushed and forced downwardly toward and into the recess or depression *b'* in the bottom of the sheet-metal cup B the bail-wire, where it traverses the soft-metal plug, is bent or crimped, as clearly shown at Fig. 3, thus firmly securing it in position and against withdrawal without mutilation or destruction of the characters or letters impressed by the die of the sealing-press, the wire, as shown more clearly at Fig. 3, passing over and upon the edge of the converging wall of the sheet-metal cup and forced downwardly or at right angles inside of said wall, thus producing a double "bite."

The bottom inside surface of sheet-metal cup is made with a roughened surface, as shown at Figs. 2 and 3, which induces to a more intimate contact between the lead disk and the sheet-metal cup.

By reference to Figs. 1, 2, 4, and 5 it will be seen that many variations may be made in the design or shape of the soft-metal plug and cup and at the same time preserving the

generic idea of a raised crown on the soft-metal plug and a corresponding depression or countersink in the bottom of the sheet-metal cup, so that the metal constituting the crown of the plug, when displaced by the action of the sealing-press, will be forced into and received by the cavity in the bottom of the cup and permit of the bending or crimping of the bail-wire, and it will accordingly be understood that I do not wish to be limited to any precise design so long as the generic feature of construction is preserved.

By reference to the Letters Patent hereinbefore referred to and comparison of the same with my invention it will be observed that in my improved construction the formation of threading-passages through the wall of the comparatively hard sheet-metal cup is rendered unnecessary, while at the same

time I am enabled to secure substantially as permanent a locking action upon the wire by the compression of the soft-metal plug.

What I claim as new, and desire to secure by Letters Patent, is—

A seal embodying in its organization a bail-wire C, a hat-shaped soft-metal plug A with upwardly-extending crown, formed with wire channels *b*, a sheet-metal cup B having converging side wall and a countersink or depression *b'*, corresponding with the crown of the soft-metal plug, substantially as and for the purposes set forth.

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

WILLIAM THURSTON GILBERT.

Witnesses:

RICHARD B. ALDCROFTT, Jr.,
H. R. FISHER.