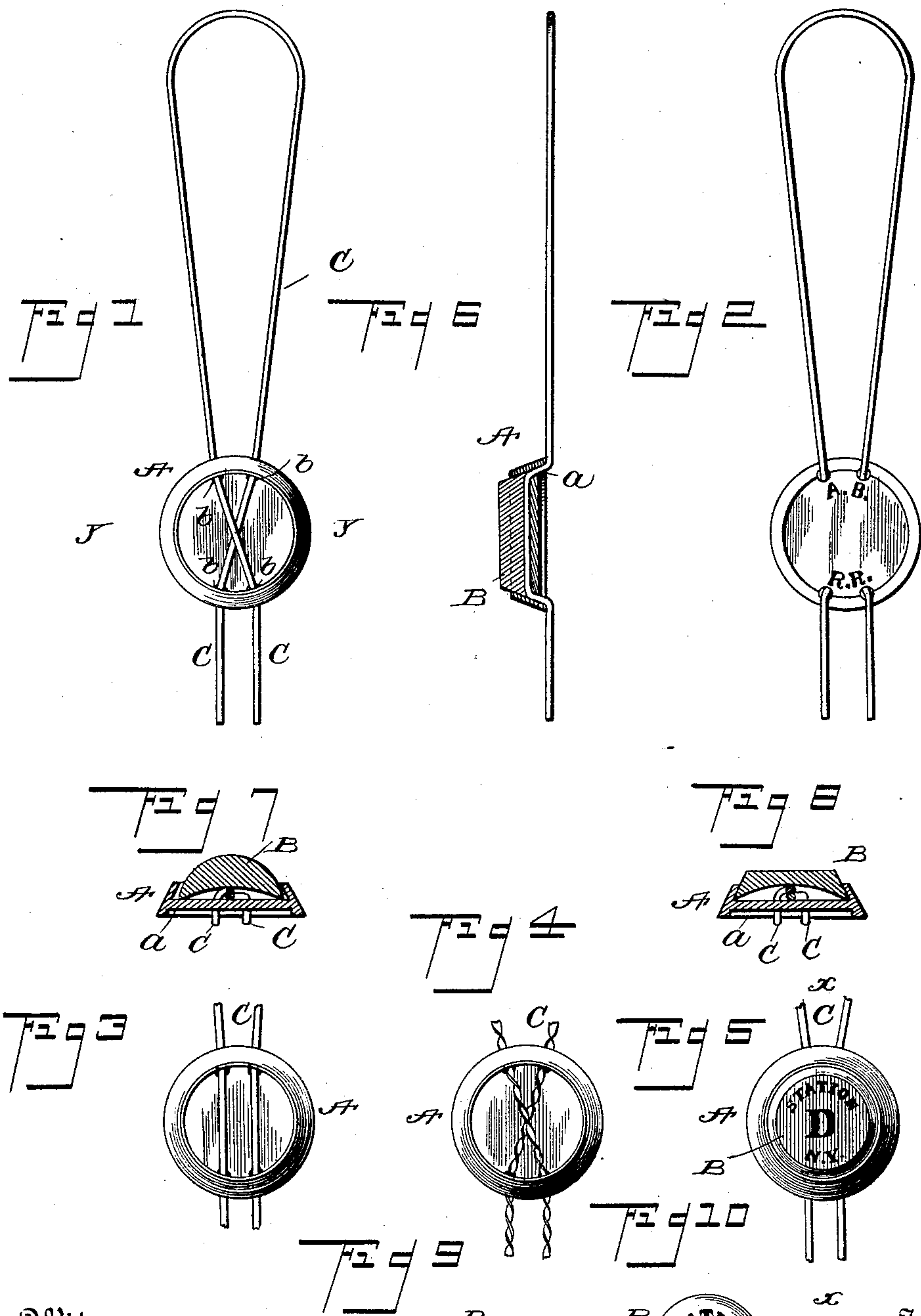


(No Model.)

F. W. BROOKS.
CAR SEAL.

No. 481,388.

Patented Aug. 23, 1892.



Witnesses

Edwin L. Bradford
Curtis Hammond



By his Attorney



Inventor
Franklin W. Brooks

Spencer W. Squire

UNITED STATES PATENT OFFICE.

FRANKLIN W. BROOKS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
WILLIAM C. ROGERS, OF SAME PLACE.

CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 481,388, dated August 23, 1892.

Application filed May 11, 1892. Serial No. 433,645. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN W. BROOKS, a citizen of the United States, residing at New York city, in the county of New York 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 seals for freight-cars, express-packages, &c.

It has for its object a seal which shall be economic of construction, readily attached to the car or package, and secure against fraud or removal by any unauthorized person without detection.

With these ends in view my invention consists of a seal composed of sheet metal struck up into cup-shaped form, with walls inclined inwardly and the back recessed or depressed and provided with threading-holes for the securing-wire, in combination with a soft-metal plug adapted to be compressed by the ordinary sealing-press into the space within the inclined wall of the cup, thus securely holding the wire in place and at the same time preventing without detection the removal of the soft-metal plug.

In order that those skilled in the art may fully understand my invention, I will proceed to describe its construction in detail by the manner in which it is used, referring by letters to the accompanying drawings, in which—

Figure 1 represents a top or plan view of the sheet-metal cup with the wire bail threaded therein, said wire being crossed within the wall of the cup as a means of greater security against the withdrawal of the same. Fig. 2 is a plan view of the rear side of the same. Fig. 3 is a view similar to Fig. 1, but illustrating the wire bail having its ends threaded through the cup in parallel position. Fig. 4 is a similar view to Fig. 1, illustrating the use of twisted, corrugated, or crimped wire for the bail in lieu of the ordinary plain wire. Fig. 5 is a view similar to Fig. 1 with the soft-metal plug compressed in place and imprinted

by the sealing-press with the station at which the seal is put upon the car or package. Fig. 6 is a longitudinal section taken at the line x of Fig. 5. Fig. 7 is a cross-section taken at the line y of Fig. 1 and with the soft-metal plug located in position preparatory to being compressed and locked in place within the beveled wall of the cup. Fig. 8 is a view similar to Fig. 7 with the soft-metal plug compressed and secured in place. Fig. 9 is a cross-section of a sheet-metal substitute for the soft-metal plug; and Fig. 10 is a plan view of the same, showing the imprint of any suitable matter which is made upon the sheet-metal plug at the time it is originally stamped up and before it is compressed in the cup or holder.

Similar letters of reference indicate like parts in the several figures.

A represents a sheet-metal cup struck up from flat tin or other suitable metal, having its base or bottom slightly depressed, as shown at a , Figs. 6, 7, and 8, and with its side wall oblique or inclined inwardly, as clearly shown in the figures referred to. At the line of juncture between the side wall and the base it is provided with four threading-holes b , through which the ends of the wire bail are threaded, starting from the rear, passing through the interior of the cup, and then outward and backward at the lower edge, thus making four right-angled bends in the wire. The ends of this wire bail may cross each other in their transit through the cup, as illustrated at Fig. 1, or they may pass through the same in parallelism, as shown at Fig. 3. The threading-holes in the cup being located at the point of juncture of the base and wall enable a person threading the same to readily find said threading-holes even in the dark by passing the end of the wire at the back of the cup in the angle formed between the bottom and wall and in a similar way by traversing around the acute angle on the interior of the cup formed by the juncture of the wall and bottom.

In furnishing the seals to the market one end only of the wire bail is passed through the threading-holes and secured temporarily in place by properly bending the same, and when used in sealing a car or package the

other end is then passed through in a similar manner and as heretofore referred to and shown in the drawings, after which a soft-metal plug B, of convex form on top and of sufficient diameter to just pass within the converging wall of the sheet-metal top, is placed in position, as indicated at Fig. 7, where it will be temporarily held by its own gravity until acted upon by the sealing-press, which latter when in use flattens the crown of the soft-metal plug and forces the body of the same tightly within and under the converging wall of the sheet-metal top and tightly compresses the bailing-wire against the bottom of the same. During this operation of compressing the soft-metal plug it may be suitably impressed or embossed with any suitable characters made in the die of the sealing-press, and it will be seen that when this soft-metal plug is locked in place it is rigidly and positively secured against removal, except by bodily cutting the same out and defacing it, and at the same time the bailing-wire, being flattened down against the base of the cup, is caused to make a right-angled bend at each diametric side of the cup, and thus rendering it impossible to withdraw the same by any strain which can be exerted less than that which would break the wire.

In the process of manufacturing the sheet-metal cup the exterior surface of its bottom may be impressed with any character or design indicating the railroad upon which it is used or its ownership, and the character impressed upon the soft-metal plug indicates the geographical location at which the car or package was officially sealed.

While I have shown and prefer the use of a soft-metal plug B as the means for securing the bail-wire C in place and receiving the station-indication impressed by the sealing-press, I may use in lieu of such soft-metal plug a sheet-metal dome-shaped disk, (illustrated at Fig. 9;) but when such disk is used the station-indication or other character designed to be impressed upon it would necessarily have to be so impressed during the process of manufacture of the disk. I of course understand that in all railroad-seals composed of a body of metal compressed upon or around a bailing-wire there is only comparative security against removal; but I am also aware of the fact that in exact propor-

tion to the difficulty of such removal the value of such seals is increased.

While I prefer the circular form of the sheet-metal cup as the most economic of construction, I do not wish to be confined absolutely to such configuration, as it may vary in this respect without departing from the spirit of my invention; and I likewise do not wish to confine myself to the shoulder or recess surrounding the exterior of the bottom, though I prefer the same, because said shoulder or recess may be eliminated and the bottom made perfectly flat.

The advantages of the shoulder or recess consist in the multiplication of angles assumed by the wire bail and also as furnishing a ready means whereby the wire may be expeditiously threaded through the holes; but it will be understood that in the absence of the recess or shoulder the threading-holes, located as they are through the base of the hard-metal cup, the wire when threaded and bent into position forms right angles, which when the soft-metal plug is compressed thoroughly anchors the wire in place, the distance between the angles at each side of the cup being in exact proportion of course to the thickness of metal composing the base of the cup.

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

1. The sheet-metal cup A, with converging wall and threading-holes *b*, located in the bottom at the point of juncture between said bottom and the converging wall, in combination with the bail-wire C, threaded as described, and the soft-metal plug B, compressed and expanded within the wall of the cup, substantially as and for the purpose hereinbefore set forth.

2. The sheet-metal cup A, with converging wall and formed with the exterior depression or shoulder *a* and threading-holes *b*, located in the angle formed between the shoulder *a* and the bottom of the cup, in combination with the bail-wire C and soft-metal plug B, substantially as and for the purpose set forth.

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

FRANKLIN W. BROOKS.

Witnesses:

D. G. STUART,

N. CURTIS LAMMOND.