(No Model.)

E. J. BROOKS.

METALLIC SEAL.

No. 324,647. Patented Aug. 18, 1885.

Fig. 1.

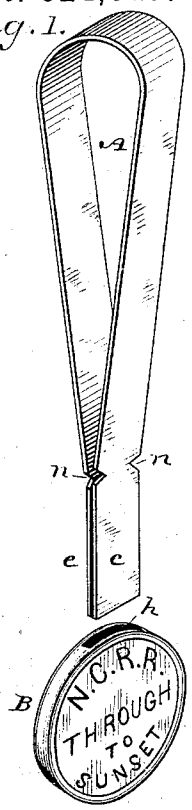


Fig. 2.

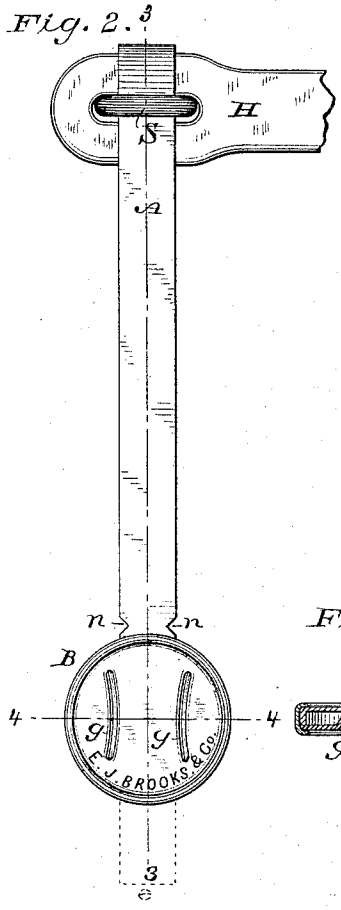


Fig. 3.

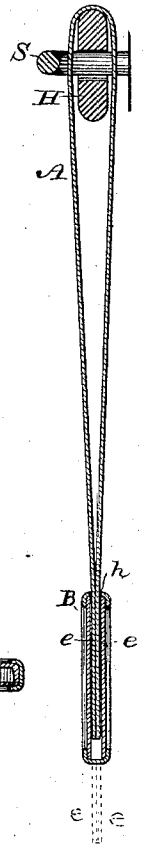


Fig. 4.

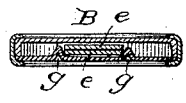


Fig. 5.

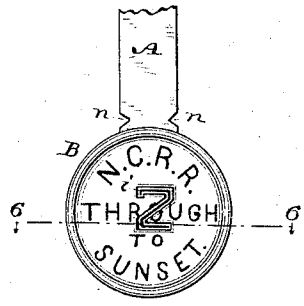


Fig. 6.

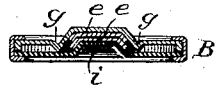
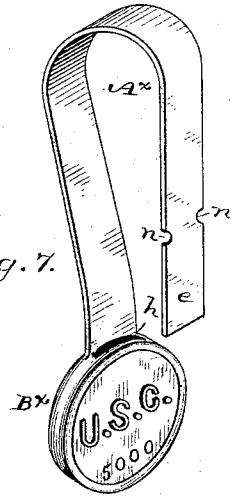


Fig. 7.



WITNESSES

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UNITED STATES PATENT OFFICE.

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METALLIC SEAL.

SPECIFICATION forming part of Letters Patent No. 324,647, dated August 18, 1885.

Application filed June 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BROOKS, a citizen of the United States, residing at East Orange, in the State of New Jersey, have invented a new and useful Improvement in Metallic Seals, ("D,") of which the following is a specification.

In common with numerous "seal" inventions heretofore patented by me, the present invention relates to improvements in those seals for railway freight-cars, baggage, &c., each of which consists of a flexible strip of sheet metal, commonly termed its "shackle," with means for uniting the ends of the shackle after it has been passed through a pair of staples or otherwise applied to the object which it is to secure, so that said ends cannot be separated without destroying the seal or so marring it as to insure the detection of its violation.

This invention consists in an improved seal of the aforesaid class composed of a flexible shackle of sheet metal and a hollow seal-disk, also of sheet metal, the latter provided with a threading hole or holes to admit the threading end or ends of the shackle, and manufactured with the requisite or desired distinguishing marks in cameo and intaglio, either or both, and adapted to be punched or indented to secure the shackle ends against withdrawal, and in certain auxiliary features of construction hereinafter set forth and claimed.

The main object peculiar to the invention is to provide for the use of a sheet-metal seal-disk, as aforesaid, with distinguishing lettering, &c., formed therewith by suitable dies in power-presses, so as to be clear and sharp, and as numerous and complicated as may be desirable. The seal-disks may thus be adapted to convey considerable information heretofore commonly expressed on superadded tags, and the duplication of a broken or marred disk by means of hand-tools is rendered impossible.

A sheet of drawings accompanies this specification as part thereof.

Figure 1 of these drawings is a perspective view of the two parts of a preferred form of this improved seal ready for use. Fig. 2 is an elevation of the same ready for the press. Figs. 3 and 4 represent sections on the lines 3 3 and 4 4, Fig. 2, respectively. Fig. 5 is a face view thereof pressed; and Fig. 6 represents a cross-section of the pressed seal on the line 6 6, Fig. 5. Fig. 7 is a perspective view of a one-part seal constructed according to the same invention in part, ready for use.

Like letters of reference indicate corresponding parts in the several figures.

The present seal in either of its forms is composed of a flexible sheet-metal shackle, A or $A^{\times}$, and a hollow sheet-metal seal-disk, B or $B^{\times}$. The shackle A, Figs. 1 to 6, inclusive, is distinct from the seal-disk B until the parts are united at the pressing operation, as illustrated by Figs. 5 and 6. It is preferably of "tin," (tin-plate,) and may be identical with tin strip shackles for seals, as heretofore used, save that it is preferably provided with gage-notches *n*, for a purpose which will presently appear. Its respective extremities *e* beyond these notches constitute its threading ends. It may be shipped and handled straight or in the shape represented by Fig. 1.

The seal-disk B is composed of three (or it may be two or more than three) die-formed pieces, united to form the disk by automatic machinery in use for making similar articles for other purposes, its respective faces being provided in course of manufacture with embossed lettering or distinguishing-marks of any preferred description to convey any information which it may be desirable to convey thus to inspectors of seals or of the goods which they protect. The seal-disk is provided, moreover, with a threading-hole, *h*, in its upper edge, adapted to admit the two shackle ends *e* together, as represented in Fig. 1, or successively, so that they shall project into the seal-disk, as represented in Figs. 2 to 4, inclusive, after the shackle is applied to the hasp H and staple S of a car-door fastening, for example, as shown in Figs. 2 and 3, or in any suitable way. This seal-disk B has been further provided, as represented by Figs. 2 and 4, with indented end guides, *g g*, preferably formed in its back, as shown in Fig. 2, and projecting inward, as shown in Fig. 4, so that the inserted shackle ends shall be confined to a path across the center of the seal-disk. Said notches *n* indicate whether or not the respect-

ive shackle ends have been fully introduced into the seal-disk; and with the shackle ends so inserted and held in place within the seal-disk by said guides *g g*, it is only necessary to stamp or punch the seal-disk at or near its center, as represented at *i* in Figs. 5 and 6, to indent therewith both shackle ends, so as to securely fasten them against their withdrawal or the withdrawal of either of them.

If ductile sheet-brass be used for the seal-disk, as preferred, the fastening-indentation *i*, Figs. 5 and 6, may be of considerable depth, as represented, without any danger of separating the parts of which the seal-disk is composed, as aforesaid. Said indentation is preferably in the form of an intelligible character—a numeral, for example, as represented in Fig. 5; but this is not considered essential, especially if the shackle be provided with permanent distinguishing-marks in the shape of lettering or the like, as heretofore proposed by me, so as to prevent the duplication of a broken or marred shackle.

The seal-disk B may be constructed with a second threading-hole in line with the threading-hole *h*, and the shackle ends *e e* be adapted to extend through and project below the seal-disk, as shown in dotted lines in Figs. 2 and 3. In a seal thus constructed said gage-notches *n* and said guides *g* may be omitted.

The shackle $A^{\times}$ and seal-disk $B^{\times}$ are made together as one part of suitable sheet-metal, (brass or copper, for example,) as clearly represented by Fig. 7. The shackle $A^{\times}$ has consequently a single threading end *e*, provided preferably with gage-notches *n*, as aforesaid, and the seal-disk $B^{\times}$ has a threading hole or holes, *h*, adapted to receive this end of the shackle after it has been applied to a hasp and staples or a pair of staples, for example, after which the seal is pressed in the same manner as the form first described, and a seal of substantially the same degree of security is thus produced.

Intaglio distinguishing-marks in the form of lettering are represented in Figs. 1, 2, and 5, and both cameo and intaglio in Fig. 7, "U. S. C." being cameo or raised. Either style may be produced with equal facility in the manufacture of the seal-disks, and marks as numerous and complicated as may be desired for any purpose may be thus furnished with clearness, being produced by dies in power-presses, instead of by hand pressing.

Having thus described my said improvement in metallic seals ("D,") I claim as my invention and desire to patent under the present specification—

1. An improved seal composed of a flexible sheet-metal shackle and a hollow sheet-metal seal-disk, the latter provided with a threading hole or holes to receive the threading end or ends of the shackle, and with permanent distinguishing-marks embossed in one or both faces of the seal-disk, said shackle end or ends being fastened against withdrawal by an indentation therein and in the seal-disk, substantially as herein specified, for the purposes set forth.

2. The combination, in an improved seal, of a flexible sheet-metal shackle provided with gage-notches in one or both edges, immediately above each threading end, and a hollow sheet-metal seal-disk having a threading-hole in its upper edge only to receive the threading end or ends, substantially as herein specified.

3. In combination with a sheet-metal shackle provided above each threading end with gage-notches, a hollow sheet-metal seal-disk having a threading-hole in its upper edge, and provided with indented guides to confine the threaded shackle ends to the middle of the seal-disk preparatory to pressing, substantially as herein specified.

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HENRY L. C. WENK.