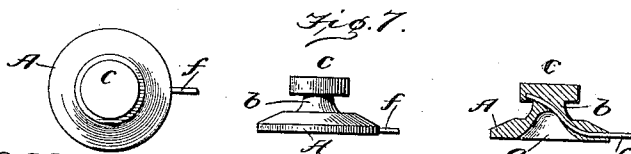
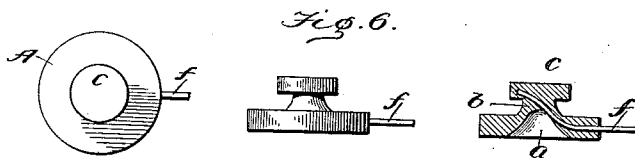
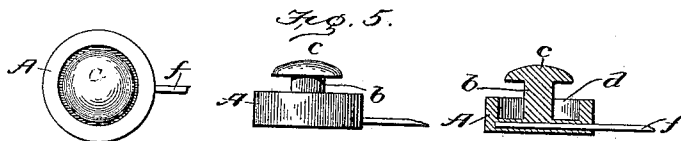
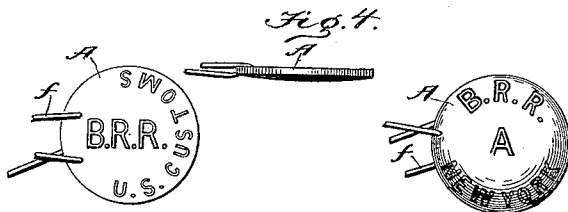
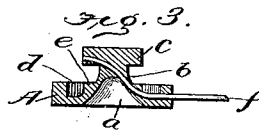
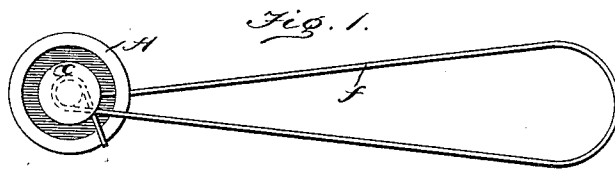


(No Model.)

F. W. BROOKS.
SEAL.

No. 511,724.

Patented Dec. 26, 1893.



witnesses

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UNITED STATES PATENT OFFICE.

FRANKLIN W. BROOKS, OF NEW YORK, N. Y.

SEAL.

SPECIFICATION forming part of Letters Patent No. 511,724, dated December 26, 1893.

Application filed August 30, 1893. Serial No. 484,349. (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, in the county of New York and State of New York, have invented certain new and useful Improvements in 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 lead seals for railroads, baggage, &c. It has for its object to provide a seal of economic construction and at the same time providing against fraud.

With these ends in view my invention consists in the peculiarities of construction and arrangement hereinafter and in detail described and claimed.

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

Figure 1 represents a top or plan view of one of my improved seals with one end of the wire bail anchored therein and the other in position to be secured by the action of an ordinary sealing press. Fig. 2 is a side elevation; Fig. 3 a vertical section. Fig. 4 represents respectively an edge view and a rear and front view after the seal has been duly compressed. Fig. 5 shows respectively a top plan, a side elevation and a central vertical section of a modified form of seal. Fig. 6 shows similar views of another modification; and Fig. 7 similar views of still another modification.

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

The seal *A* is composed of lead or other suitable compressible material. The base is preferably of cylindrical form and is cast with a conical or other suitably shaped depression on the under or outer side, as seen at *a*, Fig. 3. On the opposite side a pillar or post *b*, surmounted by a cap *c*, rises above the plane of the disk or seal proper. Below the cap *c* and surrounding the post or pillar *b* the disk is formed with an annular groove or recess *d* near the perimeter of the disk in such man-

ner as to form a stock shoulder *e*. The bail wire *f* has one end cast in the stock, as clearly shown at Fig. 3, and the other end is left free to be secured to the body or article to be protected by the seal; and when the said wire has been properly secured to the thing to be protected, the free end is wrapped around the post or pillar *b*, as clearly shown in Fig. 2.

It will be seen that the construction described is such that in the operation of securing the free end of the wire around the post or pillar as described, its proper location can be readily determined by the sense of feeling alone if necessary, as the relation of the disk, pillar or post and surmounting cap are such as to present a horizontal recess to receive the bail wire. After the wire *f* has been arranged around the post or pillar *b* the seal is grasped by the dies of the sealing press and subjected to compression, which act first causes the stock composing the post or pillar to move downward and fill in, as it were, the space produced by the cavity *a*. A further and continuous compression of the lead then crushes and expands the cap *c* filling up the annular recess *d*, seals the joint between the lead composing the cap, and that constituting the rim of the disk, and at the same time brings the anchorage of the wire bail near the center of the crushed and compressed seal, thus adding to the security against removal. During the complete compression of the seal any suitable designations are impressed upon either or both sides thereof as clearly shown at Fig. 4.

Instead of forming the annular groove *d* with a shoulder *e*, as seen at Fig. 3, the shoulder *e* may be dispensed with, as seen in section at Fig. 5, and the conical depression *a* may also be dispensed with in such case, though I prefer to use the same, and as shown at Fig. 6, in section, the annular groove *d* may be dispensed with when the conical depression *a* is used, it being understood that though these two features of construction cooperate to produce better results when both are used, than can be obtained in the absence of either, while at the same time each of them produces a desirable result independent of the other. That is to say, the pillar or post *b*, surmounted by the cap *c*, and the annular recess *d* are desirable in anchoring the wire

f near the center of the body of the seal and preventing fraudulent access to the same, and the presence of the cavity *a* is important in rendering the crushing of the pillar or post *b* more easy than is the case where no cavity is provided.

In all of the modifications shown, including that illustrated at Fig. 7, it will be seen that the pillar *b* and cap *c* are exposed above the plane of the disk and consequently the free end of the wire can through the sense of feeling alone, be readily located, and that the presence of the cap *c* prevents any accidental displacement of the wire before or during the act of compressing the lead, and hence it will be understood that while the different features of construction named collectively add to the desirability of the seal, they also possess individual advantages and hence the claims made.

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

1. A seal embodying in its construction a

body or disk portion *A* with the wire bail cast therein, a pillar or post *b* adapted to receive the free end of the bail wire, an annular groove *d* in the face of the disk *A*, and a surmounting cap *c* to hold and conceal the free end of the wire, substantially as hereinbefore described.

2. A seal embodying in its organization the disk or body *A*, the pillar *b*, cap *c*, and conical cavity or depression *a*, substantially as and for the purpose set forth.

3. A seal embodying in its organization the disk *A*, the pillar or post *b*, the cap *c*, the conical cavity *a*, and the annular groove or recess *d*, substantially as and for the purposes set forth.

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

FRANKLIN W. BROOKS.

Witnesses:

N. CURTIS LAMMOND,
JNO. J. HARROWER.