F. W. BROOKS.

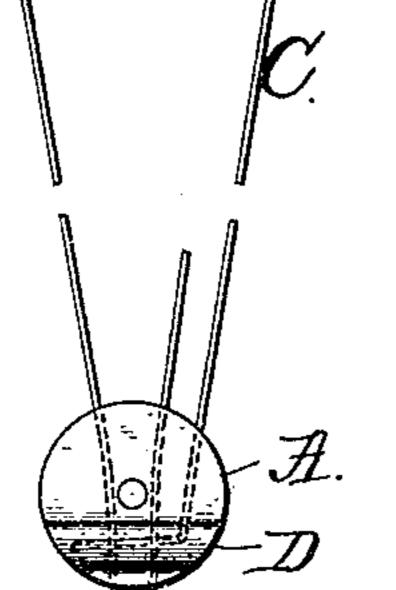
LEAD SEAL.

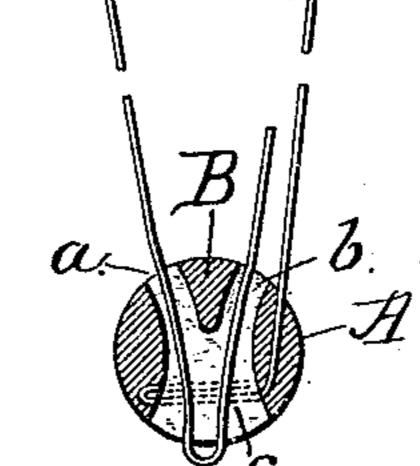
No. 354,036.

Patented Dec. 7, 1886.

FIG.I.

F16.2.

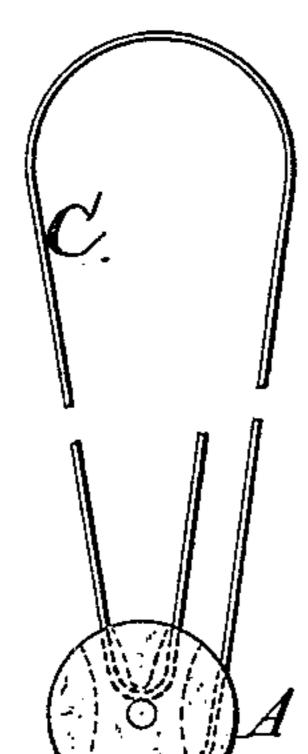


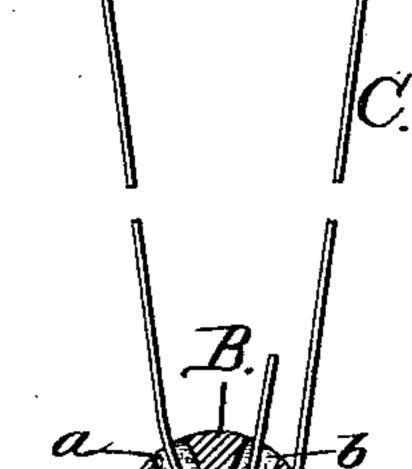


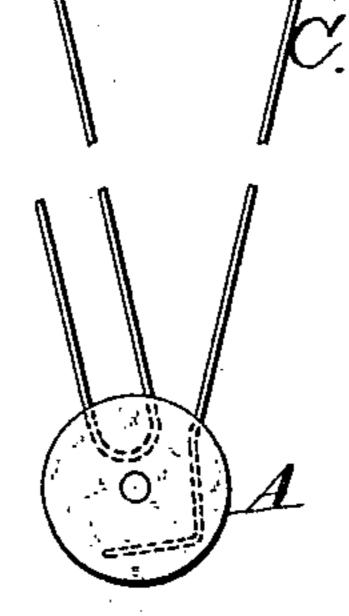
F1G.3.

F16.4.

F1G.5.

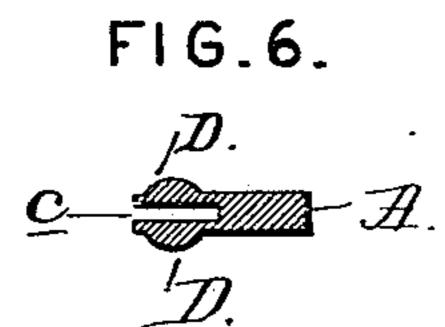


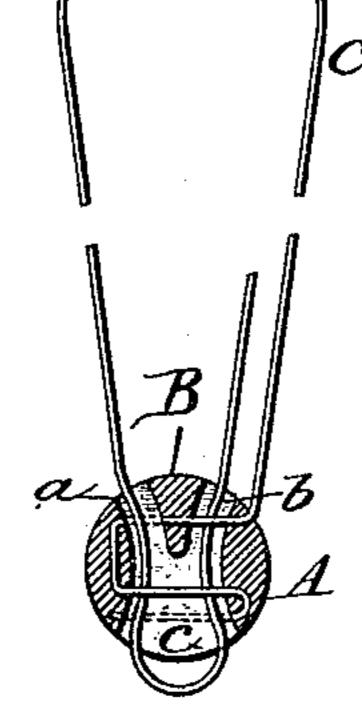


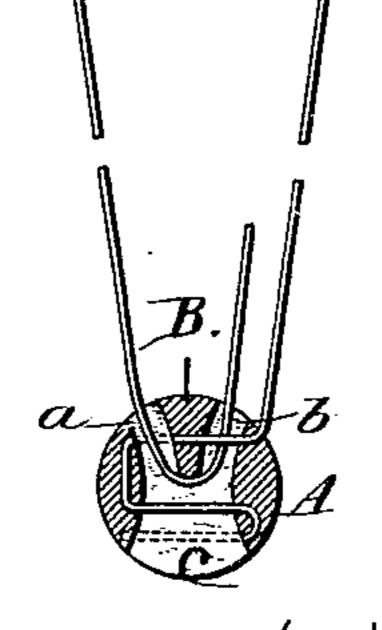


F1G.7.

FIG.8.







UNITED STATES PATENT OFFICE.

FRANKLIN W. BROOKS, OF NEW YORK, N. Y., ASSIGNOR TO THE NEW YORK LEAD SEAL AND PRESS COMPANY, OF SAME PLACE.

SPECIFICATION forming part of Letters Patent No. 354,036, dated December 7, 1886.

Application filed October 11, 1886. Serial No. 215,897. (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, N. Y., have invented new and useful Im-5 provements in Lead Seals, of which the following is a specification.

My invention relates to certain new and useful improvements in lead seals; and it has for its object to provide against the stripping of to the seal from the wire shackle used in connection therewith.

Prior to my invention many features of construction have been devised and suggested for accomplishing a purpose similar to that aimed 15 at by me; but none with which I am familiar have proved entirely successful, as most of them are more or less liable to accidental stripping or else capable of being tampered with when suitable implements are employed for 20 that purpose.

My invention consists in forming the seal with a suitable anchor near the upper edge, and with threading slots or apertures each side of said anchor, extending through the 25 seal and communicating at the lower edge with a transverse slot or opening adapted to be closed to prevent access to the concealed portion of the wire shackle, as will be hereinafter more fully set forth.

My invention further consists in forming the seal with a preponderance of metal immediately over the transverse slot, to provide for the proper closing of the latter, as will be herematter explained.

My invention further consists in casting one end of the shackle in the seal and across the transverse slot, and threading the free end of the shackle and anchoring the same, all as will be hereinafter explained.

In order that those skilled in the art to which my invention pertains may know how to make and use the same, I will proceed to describe the construction and method of using it, referring by letters to the accompanying draw-45 ings, in which—

Figure 1 is a plan view of a seal and shackle before the latter has been drawn up and anchored. Fig. 2 is a similar view with the lead seal shown in section. Fig. 3 is a view simi-50 lar to Fig. 1, but showing the shackle drawn up against the anchor and concealed and pro-

tected by the compression of the lead. Fig. 4 is a similar view with the lead seal shown in section. Fig. 5 is a view similar to Fig. 3, but showing the free end of the shackle threaded 55 in an opposite direction. Fig. 6 is a crosssection of the lead seal, showing the preponderance of metal over the transverse slot. Fig. 7 is a plan view with the lead seal in section, showing a modification in the form of the 60 "cast-in" end of the shackle and the mode of threading the free end to interlock; and Fig. 8 is a similar view with the free end of the shackle drawn up into place.

Similar letters denote like parts in the sev- 65 eral views.

A represents the seal, which is made of lead, with a solid portion or anchor, B, and wire or shackle orifices or channels at each side of the anchor, as shown at a b. These orifices ex- 70 tend entirely through the seal by communicating with a transverse slot or opening, c.

C is the wire shackle, one end of which is bent at about a right angle and returned upon itself and cast in the lead seal, as most clearly 75 illustrated at Fig. 2, although a single bend of the wire may be deemed sufficient, as illustrated at Figs. 4 and 5. The free end of the shackle is passed down through the orifice aand returned through b, as seen at Fig. 4, or 80 down b and up through a, as shown at Fig. 5, until the curve or loop made by the return is drawn up against the solid portion or anchor B. The lead is then compressed by any of the well-known seal-presses, and the slot c is closed 85 by the displacement and compression of the preponderance of metal shown at D, Fig. 6, effectually concealing the wire shackle contained within the seal and effectually protecting the same against any manipulation by 90 tools or otherwise. The lower end of the shackle, which is cast within the seal, being returned in U form, as most clearly shown at Figs. 7 and 8, has one leg below the transverse slot and the other above it; or, in other words, 95 the legs of the U are cast in the metal on opposite sides of the transverse slot c, so that when the seal is compressed the legs are forced together and thoroughly bound or tied by the lead.

At Figs. 7 and 8 is shown a modification of the manner of constructing the cast-in portion

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or end of the shackle, which, as will be seen, is bent back and forth three times, and so located within the lead with reference to the orifices a b and slot or opening c that the free 5 end of the shackle may be passed over one side of the first or upper bend and on its return under the other side, and thus when drawn up the bend or loop of the free end of the shackle will straddle the first or upper bend of the to cast in portion, and thus serve to strengthen and assist the anchor B, and it will be seen that the lower bent portion, when the seal is compressed, forms a dam or bridge across the closed slot c and presents a barrier to the in-15 troduction of any tool or implement designed to reach and grasp the loop of the shackle, which is interlocked with the upper bend of the cast-in portion and the anchor.

I am of course aware that it is not new, 20 broadly, to cast one end of the shackle in the lead seal, and I do not, therefore, wish to be understood as laying claim to any such feature of construction; but

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

1. The lead seal A, formed with threading-channels a b, anchor B, and transverse slot c, all located between the exposed sides or disk-faces of the seal, in combination with the shackle C, having one end cast in the seal 30 across the slot c, substantially as and for the purposes set forth.

2. The seal A, formed with the anchor B near the upper edge, channels a b, passing each side of the anchor and communicating 35 with the transverse slot c, in combination with the shackle C, having its lowest extremity bent and cast in the seal across the slot c and returned across the seal at or near the anchor B, whereby the threading end of the shackle may 40 interlock with the upper "return" portion, and the anchor near the upper edge of the seal, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing wit- 45 nesses.

FRANKLIN W. BROOKS.

Witnesses:

WM. C. McIntire, B. Lewis Blackford.