

(No Model.)

E. J. BROOKS.
SEAL.

No. 564,467.

Patented July 21, 1896.

Fig. 1.

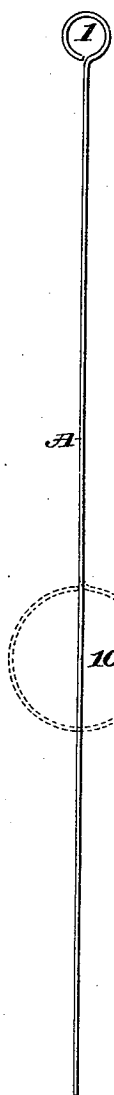


Fig. 2.

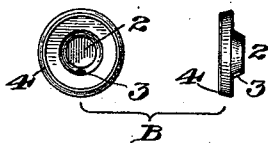


Fig. 3.

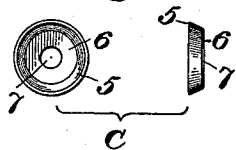


Fig. 4.

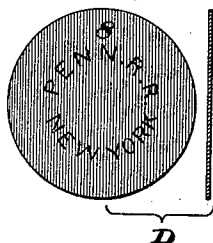


Fig. 5.

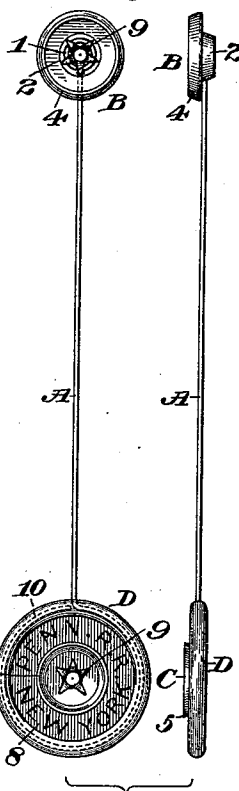


Fig. 6.

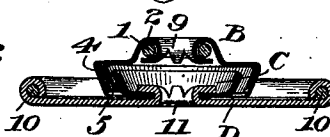


Fig. 7.



Fig. 8.

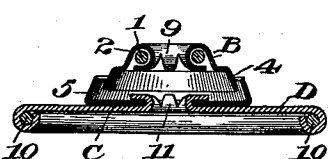


Fig. 9.

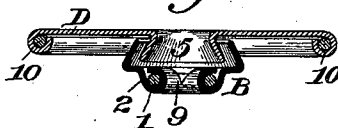


Fig. 10.

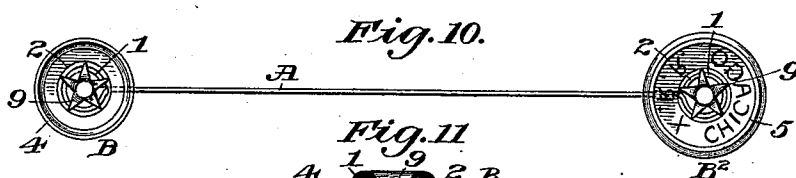


Fig. 11.

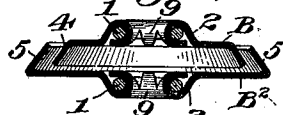


Fig. 12.



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EDWARD J. BROOKS, OF EAST ORANGE, NEW JERSEY, ASSIGNOR TO THE
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SEAL.

SPECIFICATION forming part of Letters Patent No. 564,467, dated July 21, 1896.

Application filed May 11, 1896. Serial No. 591,119. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BROOKS, a citizen of the United States of America, and a resident of East Orange, in the State of New Jersey, have invented a new and useful Improvement in Seals, of which the following is a specification.

This invention is additional to the series of improvements in seals set forth in my previous specifications forming part of United States Letters Patent No. 520,390, dated May 22, 1894, and Nos. 524,674 and 524,675, dated August 14, 1894, relating in common therewith to those press-fastened seals exclusively in which the shackle is of flexible wire conveniently and preferably plain as it comes from the wire-mill, and the pressed seal part is disk-shaped and wholly or mainly of suitable sheet metal.

The general object of the invention, in common with those of the previous inventions above referred to, is to produce improved seals which combine security, lightness, and inexpensiveness in a superior degree.

The present invention consists in a novel combination of parts, hereinafter set forth and claimed, for inseparably attaching one of the disk parts to a loop at one (or each) end of the shackle-wire; also, in the combination, in an improved seal, of a shackle-wire having loops of different sizes at its respective ends, its larger loop wiring a disk part which is conveniently provided at the factory with permanent lettering or distinguishing marks, and a pair of button-shell cups inseparably attached to the smaller loop as above and to the disk part, and having marginal flanges which are interlocked with each other by the seal-press.

A sheet of drawings accompanies this specification as part thereof.

Figure 1 of the drawings represents by full and dotted lines the wire of either form of the improved seal as it appears at the beginning of the assembling of the parts and the same as completed in the production of the specific seal represented by Figs. 1 to 7, inclusive. Figs. 2, 3, and 4 are face views and sections of the other parts of said specific seal as they appear before being assembled. Fig. 5 represents face and edge views of said specific

seal as it leaves the factory. Fig. 6 represents a cross-section of the same ready for the press, and Fig. 7 represents a like view of the pressed seal. Figs. 8 and 9 are sectional views similar to Fig. 6, showing modifications of the improved seals. Fig. 10 is a face view of another modified seal. Fig. 11 is a cross-section of the same ready for the press; and Fig. 12 is an edge view of its pressed disks, showing in dotted lines another modification.

Like letters and numbers refer to like parts in all the figures.

In the preferred combination of parts the improved seal consists of a shackle-wire A, a pair of "button-shell" cups B C, and a main disk part D, which are shown in detail by Figs. 1 to 4, inclusive. One end of the wire A is provided with a small loop 1 preliminary to assembling the parts. The cup B is constructed with a central depression 2, fitted to said small loop, a hole 3 in the circumferential wall of the depression, through which the wire is drawn in locating said loop in said depression, and a marginal flange 4, adapted to interlock with a marginal flange 5 on the other cup, C. This cup C has a flat back 6 and a central opening 7, and the disk part D is originally a flat circular blank provided with suitable lettering or distinguishing-marks 8, which may be printed thereon or stamped in raised or sunk characters, all three of the disk parts B, C, and D being of suitable sheet metal.

The loop 1 of the wire A is secured within the depression 2 of the cup B by punching a ragged eyelet 9, Fig. 5, out of the center of said cup, so that its points overlie said loop and hold it in place. The other end of the wire A is then provided with the second loop. (Shown in dotted lines at 10 in Fig. 1.) The disk part D is wired with this loop, as in Figs. 5, &c., and the cup C is attached to the face of said disk part D by a ragged eyelet 11, punched out of the center of said disk part D, its points projecting through the opening 7 to the inside of the cup, where they are securely clenched. This completes the seal for the market, as in Fig. 5.

To prepare the seal for the press, the marginal flanges 4 and 5 of the respective cups B and C are placed one within the other, as

in Fig. 6, after passing the cup B through a pair of car-door staples or the like and bringing the disk parts together in customary manner. In the pressed seal, Fig. 7, said flanges
 5 4 and 5 are securely interlocked with each other, so as to preclude any separation of the parts without such mutilation of the seal as will insure detection.

As illustrated by Fig. 8, the flanges 4 and
 10 5 of the respective cups B and C, together with the relative diameters of the respective cups, may be reversed. The disk part D may also be reversed relatively to the loop 10 and cup C, as shown in this figure.

15 The additional modification represented by Fig. 9 consists in punching the flange 5 out of the middle of the disk part D, so as to dispense with the cup C.

In the modified seal represented by Figs.
 20 10, 11, and 12 a small loop 1 is formed on each end of the shackle-wire A, and a pair of cups B B², provided, respectively, with the marginal flanges 4 and 5, are fastened to the respective loops by loop-holding depressions 2
 25 and ragged eyelets 9, as above described with reference to the cup B of the specific seal represented by Figs. 1 to 7, inclusive, said flanges 4 and 5 being interlocked with each other, as illustrated by Figs. 11 and 12, to unite the
 30 ends of the wire.

In either form of the improved seal a soft-metal rivet E, Fig. 12, may be inserted through the central openings of the united disk parts

for additional security or for supplemental press-marks, and other like modifications will
 35 suggest themselves to those skilled in the art.

Having thus described the said improvement, I claim as my invention and desire to patent under this specification—

1. In a press-fastened seal comprising a
 40 flexible shackle-wire with sheet-metal disk parts at its respective ends, the combination of a shackle-wire having a small loop at one end and a sheet-metal cup constituting one of said disk parts and having a loop-holding
 45 depression, a hole through which the wire is threaded and a ragged eyelet securing said loop within said depression, whereby said cup is inseparably attached to said shackle-wire,
 50 substantially as hereinbefore specified.

2. The combination, in a press-fastened seal, of a shackle-wire having small and large loops at its respective ends, a pair of cups having marginal flanges adapted to interlock when the seal is pressed, and one of them provided
 55 with a ragged eyelet by which said small loop is fastened within said cup, and a disk part wired with said large loop and provided with a ragged eyelet which attaches the second cup to the face of said disk part, substantially as
 60 hereinbefore specified.

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