

No. 709,626.

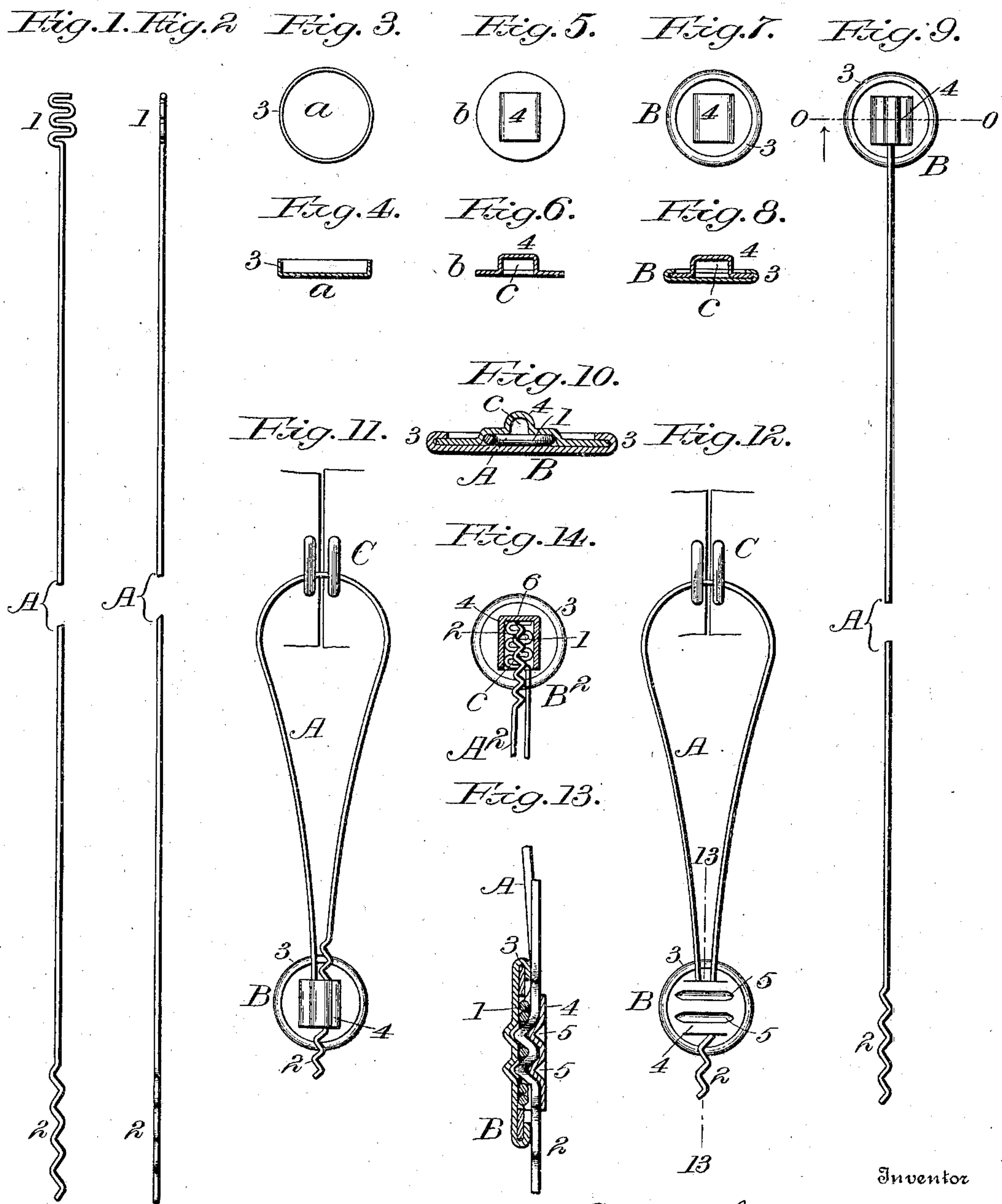
Patented Sept. 23, 1902.

E. J. BROOKS.

SEAL.

(Application filed May 26, 1902.)

(No Model.)



UNITED STATES PATENT OFFICE.

EDWARD J. BROOKS, OF EAST ORANGE, NEW JERSEY.

SEAL.

SPECIFICATION forming part of Letters Patent No. 709,626, dated September 23, 1902.

Application filed May 26, 1902. Serial No. 108,959. (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 relates to press-fastened seals for securing the doors of railway freight-cars against unauthorized entry and for other like purposes; and it consists in an improved seal of that class in which the sealing-shackle is of single wire and the seal-disk is made of sheet metal and is thus adapted to be cheaply manufactured from scrap-iron.

The distinguishing objects of the present invention are to produce a seal that may be minute in size and especially very thin and to preliminarily unite all the parts and permanently fasten the seal with the requisite security by simple pressing operations.

A sheet of drawings accompanies this specification as part thereof.

Figures 1 and 2 of the drawings are face and edge views of the shackle straight as it appears before the parts are united. Figs. 3 and 4 are back and sectional views of one part, and Figs. 5 and 6 are like views of the other part, of the seal-disk as these parts appear before being united. Figs. 7 and 8 are back and sectional views of the two-part seal-disk as it appears before it is attached to the shackle. Fig. 9 is a back view of the seal as it leaves the factory. Fig. 10 represents a magnified cross-section on the line 0 0, Fig. 9. Figs. 11 and 12 are back views of a seal applied to a pair of car-door staples, showing it respectively ready for the press and press-fastened. Fig. 13 represents a magnified section on the line 13 13, Fig. 12; and Fig. 14 represents a sectional back view of a modified seal.

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

The improved seal is composed of a flexible shackle A or A² of single wire, preferably annealed iron, and a two-part seal-disk B or B² of sheet metal, preferably and conveniently scrap-iron.

The shackle A has one end 1 provided with short fakes at right angles to the length of the wire and in the plane of the body of the

shackle. Its other end 2 is preferably and conveniently of zigzag shape to increase its adaptation to resist withdrawal lengthwise and to indicate the original extremity of the wire.

The seal-disk B is composed of two parts *a* and *b*, (shown as they appear before their union by Figs. 3 and 4 and Figs. 5 and 6, respectively,) the part *a* having a marginal flange 3 by which it is united with the part *b* and the latter having a flat raised portion 4, forming an open-ended socket *c*. The seal-disk parts *a* and *b* are united by placing the part *b* within the part *a* in the position in which they are represented by Figs. 4 and 6 and moving them beneath a reciprocating plunger, which turns in the marginal flange 3, as in Fig. 8. The faked shackle end 1 is then inserted endwise into the socket *c* and the parts are moved beneath another plunger having a bifurcated lower end, which presses down the socket-forming portion 4 at its sides upon said faked end 1, and thus permanently unites all the parts of the seal, as in Figs. 9 and 10, leaving the socket *c* still open in the middle to receive the outer shackle end 2. This outer shackle end 2 is so inserted into the socket *c*, as in Fig. 11, after passing the shackle A through a pair of car-door staples C or the like. The zigzag end 2 is thus superposed across the fakes of the faked end 1, and the seal is then fastened by an ordinary seal-press applied to the seal-disk, as represented by Figs. 12 and 13. One of my "ratchet" seal-presses is preferable for this operation, as set forth in my specification forming part of Patent No. 660,837, dated October 30, 1900; but if care be taken any style of press may be employed. The seal lends itself especially to the employment of transverse indentations 5, as in Figs. 12 and 13, to fasten both ends of the shackle A in the seal-press. At the same operation the seal-disk B may be provided with appropriate lettering or distinguishing-marks of any description.

Fig. 14 illustrates the adaptation of the seal for marking inspected meat and for like uses. In such adaptation of the seal the "outer" end 2 of the shackle A² is sharpened and the inner end 6 of the socket *c* of the seal-disk B² is closed, so as to mask such sharpened end; otherwise the parts of the

modified seal may be and preferably are of the construction above described.

The marginal flange 3 and the socket-forming raised portion 4 may both be formed on either one of the parts *a* and *b*, and other like modifications will suggest themselves to those skilled in the art.

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

1. An improved seal composed of a flexible shackle of wire having one end provided with fakes transverse to its length in the plane of the body of the shackle, and a two-part seal-disk of sheet metal having a socket-forming raised portion originally adapted to receive such faked end of the shackle endwise and depressed at its sides upon such faked end to retain it, the narrower socket so formed being adapted to receive the outer end of the shackle and to be depressed upon such outer end to fasten the seal.

2. An improved seal composed of a flexible shackle of wire having one end provided with fakes transverse to its length in the plane of the body of the shackle, and an outer end of zigzag shape, and a two-part seal-disk of

sheet metal having a socket-forming raised portion originally adapted to receive such faked end of the shackle endwise and depressed at its sides upon such faked end to retain it, the narrower socket so formed being adapted to receive the outer end of the shackle and to be depressed upon such outer end to fasten the seal.

3. An improved seal composed of a flexible shackle of wire having one end provided with fakes transverse to its length in the plane of the body of the shackle, and an outer end of zigzag shape, and a sheet-metal seal-disk composed of two parts constructed respectively with a marginal joint-forming flange and with a raised portion forming an open-ended socket; such socket having the faked end of the shackle fastened therein and constructed to receive the zigzag shackle end and to locate said zigzag end across the fakes of said faked end, preliminary to fastening the seal by a seal-press, substantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:

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THEO. S. GOTTLIEB.