## E. J. BROOKS.

SEAL. No. 599,827. Patented Mar. 1, 1898. Fig. 6.

## United States Patent Office.

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## SEAL.

SPECIFICATION forming part of Letters Patent No. 599,827, dated March 1, 1898.

Application filed December 4, 1897. Serial No. 660,797. (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.

The present invention is additional to my improvements in metallic seals patented June 10 27, 1882, and October 16, 1888, by United States Letters Patent Nos. 260,279 and 391,295. In common therewith it relates to the construction of a secure and inexpensive seal, primarily designed for freight-cars, compris-15 ing a narrow sealing strip or shackle of uniform width cut from sheet-tin (tin-plate) and provided in the sheet, or in the act of severing it, with rivet-holes, and a seal-rivet inseparably attached to the shackle at the fac-20 tory, so that the entire seal is handled as one part; and, in common with the improved seal set forth in said Patent No. 391,295, the rivetstem is protected against cutting by an eyelet-collar integral with one end of the shackle, 25 through which the rivet-stem of the unpressed seal projects.

The patented seals above referrred to, in common with other rivet-seals, have been objected to by some railroad-men on the ground that they do not give a good impression on the stem side of the shackle. One of the objects of the present invention is to fully overcome this objection without complicating the pressing operation, and another object is to more securely interlock the ends of the shackle in the act of pressing the improved seal.

This invention consists in the improved seal hereinafter described and claimed.

A sheet of drawings accompanies this speci-

40 fication as part thereof.

Figure 1 of the drawings represents a face view of the improved seal as it leaves the factory. Figs. 2 and 3 are magnified longitudinal sections of its respective ends, with a dotted addition in Fig. 3, hereinafter mentioned. Figs. 4 and 5 show the obverse and reverse of the pressed seal, and Fig. 6 is a magnified longitudinal section through the united shackle ends of the latter.

Like letters and numbers refer to like parts 50

in all the figures.

The improved seal is composed of a flexible tin shackle A, preferably and conveniently of uniform width, provided at its respective ends with eyelet-collars 1 and 2, Figs. 2 and 55 3, projecting at its respective sides, a softmetal rivet B, permanently fastened within said eyelet-collar 1 by means of a stem 3, expanded within said collar, projecting lengthwise beyond the same, and masking its end, 60 as shown in Fig. 2, and an annulus C, of soft metal, inseparably attached at the factory by upsetting said eyelet-collar 2, as in Figs. 1 and 3. The interior 4, Fig. 3, of said eyeletcollar 2 is made large enough for the stem 3 65 and eyelet-collar 1 of the unpressed seal to pass freely through the same, as shown in dotted lines in Fig. 3. After the seal is applied to the car-door staples or lock and when the seal parts B and C are thus brought to- 70 gether any suitable seal-press is applied and the seal is fastened in customary manner. In the pressed seal (represented by Figs. 4, 5, and 6, as aforesaid) said soft-metal seal parts B and C form a composite disk, the "stem 75 side" of which (shown in Fig. 4 and at the left in Fig. 6) may conveniently be made as large as or larger than the head side, Fig. 5, so as to accommodate as large an impression as may be desired. At the same time the 80 pair of eyelet-collars 1 and 2, interlocked as in Fig. 6, render the pressed seal very strong as well as secure against being successfully tampered with by cutting the soft metal.

The rivet-stem 3 of the unpressed seal, Figs. 85 1 and 2, has a deep conical cavity b, Fig. 2, which adapts it to be expanded within the eyelet-collar 1, as aforesaid, by means of a punch, in an expeditious and inexpensive manner, and the annulus C is attached in the 90 manner aforesaid by an upsetting-punch.

The outlines and proportions of the shackle A, rivet B, and annulus C may vary considerably, 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—

599,827

An improved seal composed of a flexible shackle of sheet metal having eyelet-collars projecting in opposite directions at its respective ends, a soft-metal rivet having its stem fastened within one of said collars, and a soft-metal annulus attached by the other of said collars, the interior of which is adapted to

admit said rivet-stem and the eyelet-collar surrounding the same, substantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:

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