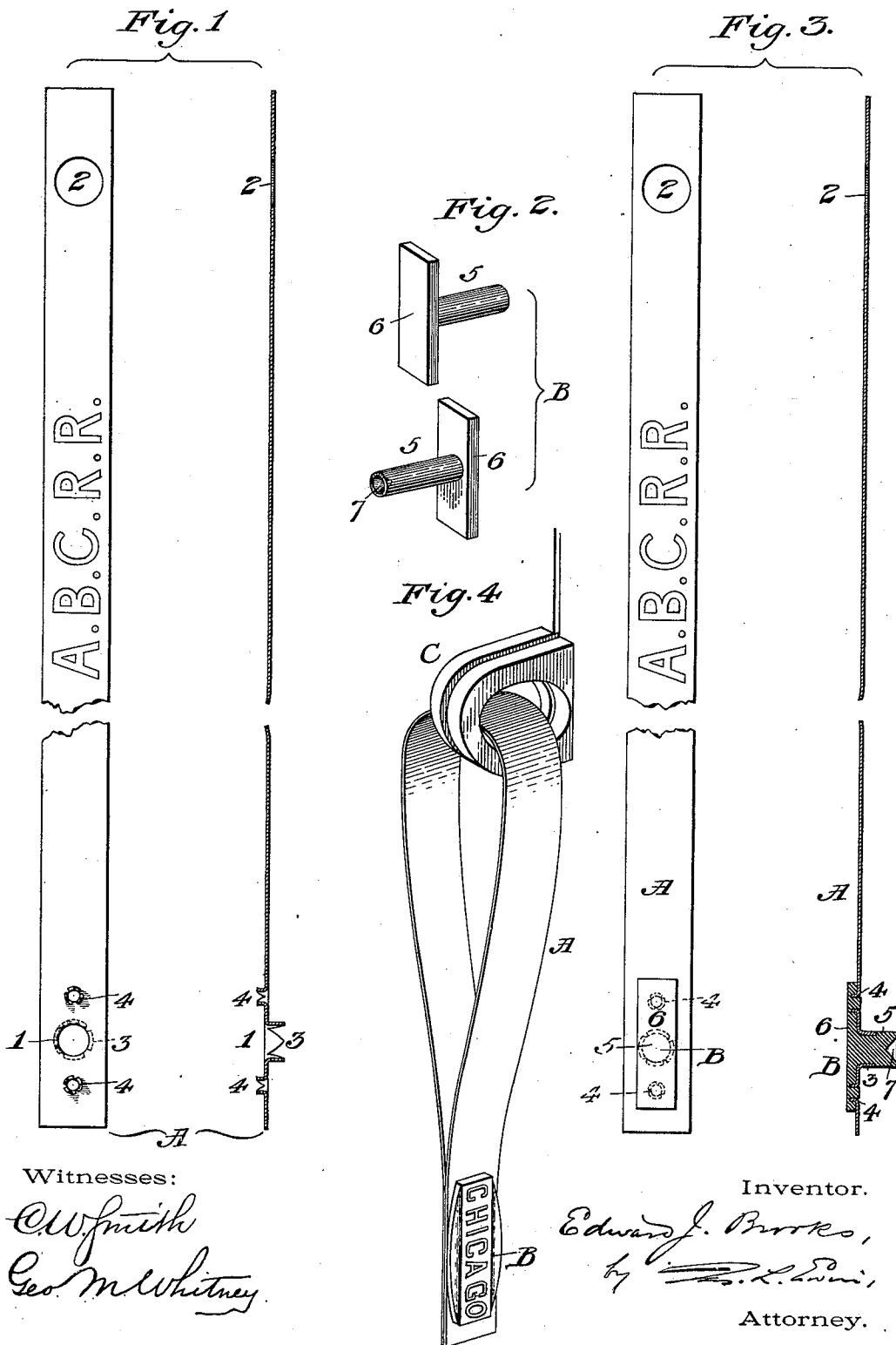


(No Model.)

E. J. BROOKS.
SEAL.

No. 520,389.

Patented May 22, 1894.



UNITED STATES PATENT OFFICE.

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

SPECIFICATION forming part of Letters Patent No. 520,389, dated May 22, 1894.

Application filed January 5, 1894. Serial No. 495,855. (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 what are known generically as rivet-seals, for securing the doors of railway freight-cars, and for other like uses.

In previous specifications forming part of United States Letters Patent No. 260,279, dated June 24, 1882, and No. 391,295, dated October 16, 1888, I have set forth what are therein termed "lead and tin" rivet-seals in which the rivets are cast fast, being combined with flexible strips (of uniform width) cut from the ordinary tin-plate of commerce, punched with the requisite rivet-holes, and also stamped or printed with lettering or distinguishing marks, in the sheet. The present invention contemplates primarily the employment of such tin strips as the shackles of the improved seals, but adapts the improved seals, in a preferred form thereof, to be constructed with shackles of celluloid or other like material upon which lead could not be cast fast; and the invention further consists in providing the rivet with a securely attached head, elongated to any required extent in the direction of the length of the shackle, so as to be stamped with the name of a sealing station in conspicuous characters, without adding materially to the weight of the rivet or of the seal as a whole.

A sheet of drawings accompanies this specification as part thereof.

Figure 1 of the drawings represents a face view and a longitudinal section of the shackle of the improved seal; Fig. 2 two perspective views of its rivet as it appears before being attached in the preferred way; Fig. 3 a face view and longitudinal section of the completed seal as it leaves the factory; and Fig. 4 a perspective view of the same after it has been press-fastened.

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

The improved seal is composed of a flexible shackle A (Fig. 1) and a compressible rivet B (Fig. 2) permanently united at the factory in the form represented by Fig. 3, and used in connection with a pair of car-door staples C, or the like, in the manner illustrated by Fig. 4.

The shackle A is preferably a narrow strip of tin (tin-plate) punched and printed in the sheet. Its respective ends are provided with rivet-holes, 1, 2; the former preferably surrounded by an eyelet-collar 3 at the back of the shackle, while the rivet-hole 2 is clean cut and adapted to freely admit said collar, as set forth in said specification forming part of Letters Patent No. 391,295. Above and below said eyelet-hole 1, the improved shackle is further constructed with two (or more) collared holes 4, with their collars or burrs projecting from the face of the shackle. The printed lettering (if any), represented by "A. B. C. R. R." in the drawings, is on what I have termed the face of the shackle, and may of course be of any description. Usually it designates the "road" in whose behalf the seal is applied.

The rivet B is preferably cast separately, as shown in Fig. 2, and consists of a cylindrical or substantially cylindrical stem 5 and a long flat head 6, the stem having preferably a conical concavity 7 in its extremity; and it is preferably of soft lead.

The stem 5 of the separately cast rivet is inserted through the rivet-hole 1 of the shackle, from face to back; and rivet and shackle are then inserted together into a suitable press, which drives the burrs of the collared holes 4 into the back of the head 6, and fills these holes with the metal of the head of the rivet, so as to securely attach both ends of the head. At the same time the stem 5 of the rivet is compressed lengthwise, being kept from bending or buckling by a corresponding projection in the press fitting said concavity 7 in the end of the stem; and the stem is thus made to tightly fill the rivet-hole 1, and to mask the edges of the eyelet-collar 3, so as to facilitate inserting the latter into the eyelet-hole 2 after the shackle is eventually passed

through the car-door staples C, or their equivalent, preparatory to fastening the seal.

The seal may be fastened, as in Fig. 4, by an ordinary seal-press, simply adapted as regards one die to retain the oblong shape of the rivet-head 6, and to provide the same with appropriate distinguishing marks as represented by "Chicago" in Fig. 4. The name of any sealing station, or a serial number of any required length, may thus be accommodated, in characters which can be readily recognized at a glance, without rendering the seal or its rivet unduly heavy or costly; while at the same time the security of the fastened seal is increased, and its manipulation is in no way complicated, as compared with the improved rivet-seals heretofore patented.

With a shackle of tin, as above, the rivet B as in Fig. 3 may if preferred be cast fast; or, if the rivet be attached by pressing as above, the shackle may be of any suitable flexible material of sufficient strength, including such materials as celluloid which would not stand contact with molten lead; the printed lettering on the shackle may be omitted, or elaborated to any required extent; and other like modifications will suggest themselves to those skilled in the art.

Having thus described the said improve-

ment, I claim as my invention and desire to patent under this specification—

1. The shackle A provided with the rivet-holes 1 and 2, the former surrounded by an eyelet-collar 3 at the back of the shackle, and with holes 4, and collars or burrs at these holes projecting from the face of the shackle, in combination with a long-headed rivet which is adapted to be inserted through said eyelet-collar with the back of its head opposed to said burrs, whereby such rivet is adapted to be preliminarily attached to the shackle by endwise compression, substantially as hereinbefore specified.

2. An improved rivet-seal composed of a flexible shackle having rivet-holes in its respective ends and provided with collared holes adjacent to one of said rivet-holes, a collar on the back of the shackle, surrounding the rivet-hole last named, and a compressible rivet having a stem which tightly fills said rivet-hole last named and a long flat head attached to the face of the shackle by means of said collared holes and their burrs, substantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:

GEO. J. WENK,
H. D. C. WENK.