E. J. BROOKS.

CAR SEAL.

APPLICATION FILED OCT. 26, 1910.

982,121. **Patented Jan. 17, 1911.**

Fig. 1.

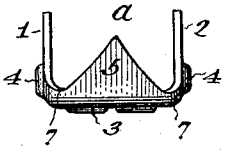


Fig. 3.

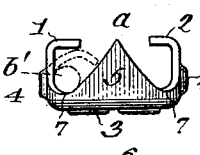
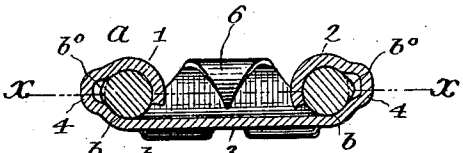


Fig. 5.



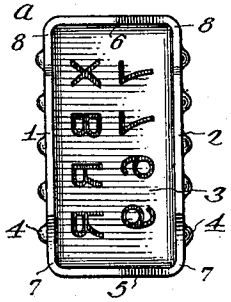


Fig. 2.

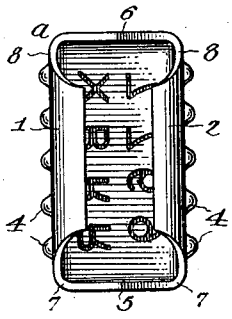


Fig. 4.

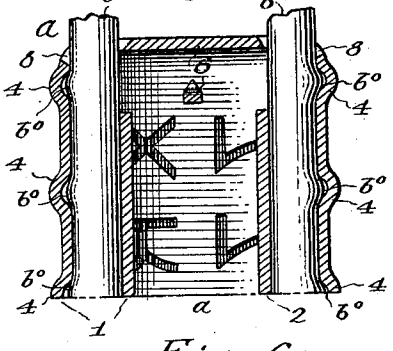


Fig. 6.

Fig. 7.

Fig. 8.

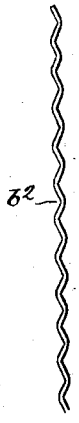


Fig. 9.

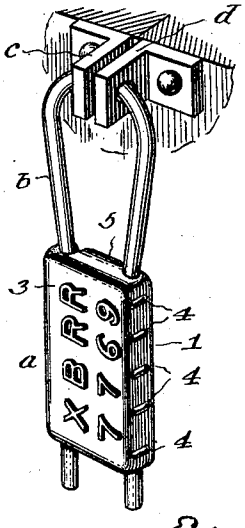


Fig. 10.

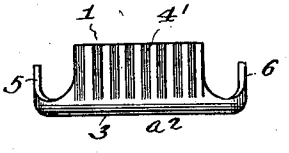
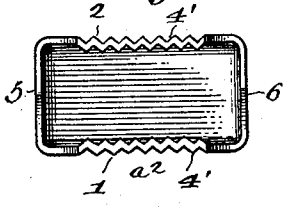


Fig. 11.



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UNITED STATES PATENT OFFICE.

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CAR-SEAL.

982,121. Specification of Letters Patent. **Patented Jan. 17, 1911.**

Application filed October 26, 1910. Serial No. 589,221.

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 Car-Seals, of which the following is a specification.

In a previous specification forming part of United States Letters Patent No. 961,931, dated June 21, 1910, I have set forth an improvement in "cording seals" characterized by a seal part made of nearly rigid sheet metal and constructed with substantially parallel lips arranged at opposite sides of an open front, and a second pair of lips substantially at right angles to those first-named and constructed with inclined edges adapted to interact with inturned extremities on the opposing lips in temporarily attaching the seal part; the lips first-named being adapted to be coiled around the respective ends of the cord by the action of a suitable seal press.

The present invention relates to seal-press fastened or press-fastenable car seals; and its leading object is to adapt such seals to be constructed on the same principle as the cording seals set forth in said previous specification.

Other objects will be set forth in the general description which follows.

The present invention consists in a seal part for car seals embodying certain novel features of construction hereinafter particularly described and claimed, or either of such features of construction; and in the combination of such seal part with a metallic shackle adapted to interact therewith as hereinafter more particularly indicated.

A sheet of drawings accompanies this specification as part thereof.

Figures 1 and 2 are respectively an end view and a face view of an improved seal part as it appears before "bending;" Figs. 3 and 4 are like views of the bent seal part as it leaves the factory; Figs. 5 and 6 represent magnified sectional views of the press-fastened seal, Fig. 5 being a cross section and Fig. 6 a section on the line x—x, Fig. 5; Fig. 7 is a perspective view of the press-fastened seal; Figs. 8 and 9 are representations of different makes of indented wire suitable for use in the improved seal; and Figs. 10 and 11 are respectively side and face views of another seal part unbent, illustrating a modification of the same invention.

Like reference characters refer to like parts in all the figures.

The improved car seal in any of its forms is composed of a seal part, a or a^2, of suitable stamped and shaped sheet metal, and a metallic shackle, b or b^2 or b^3, which is flexible but of the consistency of lead or harder metal as compared with soft cord. The seal part a or a^2 is oblong in shape, with parallel longitudinal edges or side lips, 1 and 2, adapted to contact with the wire at substantially all points throughout their length, and is thus readily made as long as may be required to accommodate on a substantially rectangular flat "back," 3, the commonly prescribed serial number or station number, represented in Fig. 7 by the number 7769, and the initials or name of the railway or station represented in Fig. 7 by X B R R, either or both, in large characters, so as to be easily read by inspectors; such characters being conveniently embossed in the back of the open front seal part in stamping the same, as represented in Figs. 1 and 2.

To adapt the longitudinal side lips 1 and 2 more effectively to interact with the metallic wire, they are provided with internally exposed roughening means, 4 or 4′, conveniently produced at the stamping operation. To adapt said longitudinal side lips 1 and 2 to temporarily hold the wire in place preliminary to the press fastening operation without bending them by the fingers, they are preferably provided with inturned extremities, as in Fig. 4 and in full lines in Fig. 3, by a bending operation, before the seal part leaves the factory; the seal part being constructed with end lips 5 and 6 having inclined edges to interact with said inturned extremities as heretofore, except that said end lips are preferably and conveniently made relatively short and without preliminary bends as shown in Figs. 1 to 4 inclusive and in Fig. 10, and may obviously be short enough in narrow seal parts to escape bending at the press-fastening operation.

To preliminarily attach the seal part to one shackle end, as is now customary in handling car seals, one of the side lips, 1 or 2, may be pressed inward, as in dotted lines at 1 in Fig. 3, so as to temporarily clamp the shackle end, b', against the opposing edges of the end lips 5 and 6 and against the abutment edges 7 and 8 over which the

shackle end extends; so short a portion of any metallic shackle being sufficiently rigid or resistant of rebending to thus prevent the accidental separation of the parts in handling the seals. With or without so preliminary uniting the seal part *a* or a^2 and the shackle *b* or b^2 or b^3, the latter is threaded through a pair of car door staples, *c* and *d*, Fig. 7, or their equivalent, and the free end or free ends of the shackle are pressed beneath the inturned extremities of the side lips 1 and 2 by hand. A suitable seal press is then applied, and said side lips are curled inward around the respective shackle ends as represented in Fig. 7, causing each shackle end to interlock with said roughening means 4 or 4′, as well as with said abutment edges 7 and 8 of the seal part, and thus to inseparably unite the parts and complete the seal as in Figs. 5, 6 and 7.

In the species represented by Figs. 1 to 7 inclusive, the roughening means 4 of the seal part *a* consists of outwardly extending indentations in the longitudinal side lips 1 and 2 forming internal edges and narrow interspaces located in the plane of the shackle ends; beyond which indentations the lips extend to the required extent; and at the press fastening operation protuberances, b^0, of the metal of a solid-wire shackle, made of copper, Swedish iron wire, or lead wire, are caused to interlock with said interspaces as represented in Figs. 5 and 6; and the shackle ends are thus securely locked against stripping. Said seal part *a*, having said roughening means 4, is adapted to interlock in substantially like manner with a shackle b^2 or b^3 of "indented" hard iron wire, either round or flat, represented respectively by Figs. 8 and 9; the protuberances of such indented wire being adapted to interlock with said interspaces of said roughening means 4.

The roughening means 4′ of the modified seal part a^2 consists of sharp corrugations extending to the free edges of the longitudinal side lips 1 and 2, which may thus be stiffened as compared with those of the first species so as to adapt a given seal part to be made of lighter sheet metal. The modified seal part a^2 may obviously be combined either with soft metal shackles *b* or with indented wire shackles b^2 or b^3, as preferred; 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. A press-fastenable car seal having, in combination, an open-front seal part of nearly rigid sheet-metal constructed with side lips provided with internally exposed roughening means and adapted to be curled inward by a seal press, and abutment edges opposed to said lips, and a flexible shackle adapted to interact with said lips, roughening means and abutment edges to fasten the seal.

2. A press-fastenable car seal having, in combination, an oblong open-front seal part of nearly rigid sheet-metal constructed with a mark-exposing flat back as long as may be required, longitudinal side lips provided with internal roughening means and adapted to be curled inward by a seal press, and a flexible metallic shackle of suitable wire adapted to interact with said roughening means in the fastened seal by protuberances on the shackle.

3. A press-fastenable car seal having, in combination, an oblong open-front seal part of nearly rigid sheet metal constructed with a mark-exposing flat back as long as may be required, longitudinal side lips provided with internal roughening means in the form of outwardly extending indentations forming internal edges and narrow interspaces located in the plane of the shackle ends, and adapted to be curled inward by a seal press, and a flexible shackle adapted to interact with said edges and interspaces in the fastened seal by protuberances on the shackle.

4. A press-fastenable car seal having, in combination, an oblong open-front seal part of nearly rigid sheet metal constructed with a mark-exposing flat back as long as may be required, longitudinal side lips provided with internal roughening means in the form of outwardly extending indentations forming internal edges and narrow interspaces located in the plane of the shackle ends, and adapted to be curled inward by a seal press, and a flexible shackle of sufficiently soft wire to be provided with protuberances within said indentations at the press-fastening operation.

5. An oblong open-front seal part for press-fastenable car seals made of nearly rigid sheet metal, and constructed with a mark exposing flat back as long as may be required, longitudinal side lips provided with internal roughening means consisting of outwardly extending indentations forming edges and narrow interspaces, said lips extending beyond said indentations, and being provided with inturned extremities and adapted to be curled inward by a seal press, end lips having inclines opposed to said side lips, and abutment edges also opposed to said side lips, substantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:
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FLORENCE E. MATTHEWS.