

W. K. EDGAR.
SEALING DEVICE.
APPLICATION FILED MAR. 6, 1912.

1,064,462.

Patented June 10, 1913.

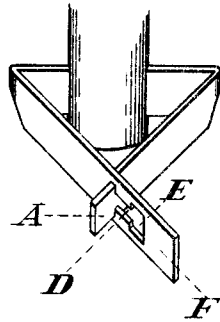


Fig. 2

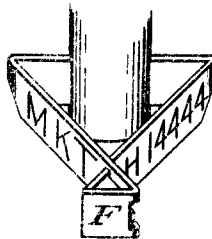


Fig. 3

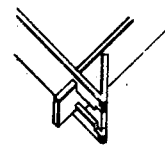


Fig. 4

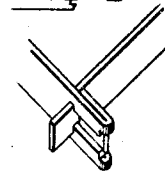


Fig. 5

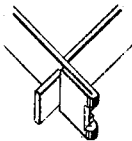


Fig. 6

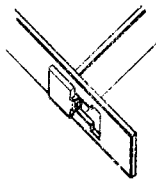


Fig. 7

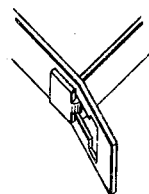


Fig. 8

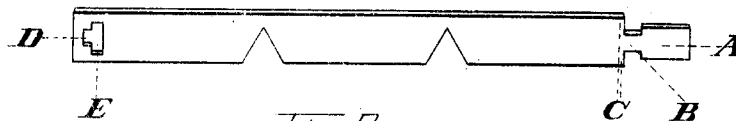


Fig. 9

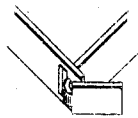


Fig. 10

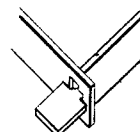


Fig. 11

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UNITED STATES PATENT OFFICE.

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SEALING DEVICE.

1,064,462.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed March 3, 1912. Serial No. 682,065.

To all whom it may concern:

Be it known that I, WILLIAM KERR EDGAR, a citizen of the United States, residing at Iola, in the county of Allen and State of Kansas, have invented certain new and useful Improvements in Sealing Devices, of which the following, together with the accompanying drawings, is a specification.

My invention relates generally to devices for sealing shipping, storage, and other receptacles and containers which are closed with door or lid, and fastened with hasp and staple, or hasp, staple and locking-pin, or some similar contrivance, but particularly to devices for sealing the fastenings of railway freight cars; and has for its objects, aside from the obviation of any kind of auxiliary sealing instrument, the production, in the way of a seal, of an article of manufacture that will consist of a single piece of material; that can be easily and cheaply manufactured; upon which can be legibly stamped or impressed such letters, figures, or other characters of distinction and identification as may be desired; that can be easily and quickly applied with the hands only, same being bare or gloved; that cannot be misapplied; that will bind and lock in the process of application; that will not break, loosen or become dislodged of its own or the car's motion, bumping or jolting, but will remain intact until disturbed by some human agency; that can readily be removed with the hands only, and which will drop apart on being broken, but which cannot be removed or unsealed, or even unlocked without being destroyed; and that cannot be successfully repaired or replaced, thus rendering a re-use of the seal impossible, and all tampering therewith readily detectable. I attain these objects by a device which consists of a single strip of iron or steel, or other suitable metal or material, of such character, quality, temper, size and weight as to be, at once, relatively rigid, bendable, and breakable, said strip being weakened by partial severance at two or more spaced points along its length, so as to render same readily bendable, localize the strain of the bends, and insure complete severance on being bent thereat through considerable angles, and subsequently straightened or rebent, and same having a notched or T-like tongue or head and shoulders at one end, and a T-like opening or slot, flanked by an apron or shut-

ter, at the other, adapted to admit, engage and secure said tongue or head on the strip being bent into an angular loop. This idea, as applied to seals, of weakening a strip of material by partial severance at certain points, for the purposes aforesaid, is not new, Letters Patent therefor having, indeed, heretofore, been granted to me, (*vide* No. 985,019). But what is distinctly and essentially new, both in conception and embodiment, is my method of engaging the otherwise free ends of the seal and securing or locking same.

Referring to the drawings, Figure 1 is a perspective view, approximately actual size, of the device ready for use. Fig. 2 is a perspective view of the same inserted in the key-hole of an ordinary locking-pin, bent into a triangular loop, and having the ends engaged. Fig. 3 represents the device, bearing letters and figures of identification, in place in a locking-pin, and locked. Figs. 4, 5, 6, 7 and 8 show other possible methods of locking same; while Fig. 9 represents a modification of the device which is a substantial equivalent, and Figs. 10 and 11 show some of its possible lockings.

Similar letters refer to similar parts throughout the various views.

The device is stamped out of a strip of iron or steel, or other suitable metal or material, and has at one end a tongue or head, A, a neck, B, and shoulders, C; and at the other, an opening or slot consisting of the combination of a longitudinal opening or throat, D, and a transverse opening or mouth, E, flanked by an apron or shutter, F, all adapted to receive, engage and secure said tongue or head, the parts being of such relative size as not only to permit of easy insertion and engagement, but to insure parting on the seal being severed at any point along its length between said head and slot. At the extremes of the mouth, E, the strip is provided with means in the form of minute notches H, to insure breaking on being bent through a considerable angle and subsequently straightened or rebent; and at the points, G, in one of the edges of the strip, and dividing it into three segments, so as to render it readily bendable into approximately an equilateral or isosceles triangle, localize the strain of the bends, and insure breaking on being straightened or rebent, the strip is partially severed by rela-

tively deep, angular, or V-shaped notches. The letters and figures, or other characters of identification, are stamped on the flat sides. With the lettered side of the strip next the car, or away from the operator, the same is inserted into the key-hole of an ordinary hasp-and-staple locking-pin, or other fastening to be sealed, and passed on through until the extreme or wing segments are both free of same. These wings are then bent forward, or toward the operator until the ends meet, whereupon the head or tongue, A, is inserted into the mouth, E, and the neck, B, thrust down into the throat, D, as shown in Fig. 2; and then the engagement is secured or locked by bending the apron or shutter, F, at the minute notches H, across or against the head, A, as shown in Fig. 3, an operation which results, at once, in closing the transverse opening or mouth, E, and firmly binding the parts in place, where they will remain until this process is reversed, wholly or in part, or the seal is broken at one or more of its angles or elsewhere, when it will fall to pieces. This apron or shutter, F, might, with like effect, be bent down in the opposite direction; or the head, A, might be bent over at the neck, B; or both said head and shutter might be bent, substantially as shown in Figs. 4 to 8, both inclusive. It will be observed that the seal resulting is really a double seal. That is to say, unless the device is first broken or severed at some point or angle other than the angle of engagement it will ordinarily require at least two breakings of same to unseal and remove it, one at the transverse opening or mouth, E, provided with means to insure this breaking, and another at one of the notches, G; for it will be apparent that the strip has been so weakened at all said points as to necessitate breaking and parting thereat on being straightened or rebent.

It is, of course, obvious and understood that various modifications, one of which is shown, may be resorted to without departing from the scope, spirit and purpose of my invention, sacrificing any of its advantages, or resulting in anything but substantial equivalents.

In the modification shown, the T-shaped slot is reversed, *i. e.*, the throat D is adjacent the end of the strip, the apron F is made shorter, and the head A is made longer so as to afford purchase for bending. Its application to any fastening to be sealed is substantially the same as in the parent device, except that the ends are engaged by

drawing the neck B up, instead of thrusting it down, into the throat D, and the engagement is secured by bending the head A.

I am aware that, prior to my invention the ends of sealing strips have, theoretically at least, been engaged by inserting a hook, at one, into an ordinary, plain rectangular slot, at the other; and I, therefore, do not claim such an engagement broadly. But

Having described my invention, I claim:

1. In a sealing device substantially as specified, a strip of material bent into an angular loop, same being weakened at each bend by partial severance and having its ends intersectionally engaged by the insertion of a T-shaped head, at one, into a T-shaped slot, at the other, and secured by bending either or both of the ends projecting beyond the line of intersection.

2. In a sealing device substantially as specified, a strip of material bent into an angular loop, same being weakened at each angle by partial severance, and having its ends engaged by the insertion of a T-like head, at one, into a T-like slot, flanked by a shutter, at the other, and secured by bending said shutter over in either of the two possible directions.

3. In a sealing device substantially as specified, a strip of metal bent into an angular loop, same being provided with means at each bend to insure severance on being rebent, and having its ends engaged by the insertion of a T-shaped head, at one, into a T-shaped slot, flanked by a shutter, at the other, and secured by bending said shutter over in either of the possible directions at a point provided with means to insure its severance on being rebent.

4. In a sealing device as specified, a strip of metal bent into a triangular loop, same being weakened at each bend by partial severance, and having its ends engaged by the insertion of a reduced T-like head, at one, into a T-like slot, flanked by a shutter, at the other, and secured by bending said shutter over at the transverse portion of said slot, there being means provided at the extremities of said portion of said slot to insure severance thereat on being rebent.

In testimony whereof I have hereunto affixed my hand in the presence of two witnesses.

WILLIAM KERR EDGAR,

Witnesses:

S. H. FLICKINGER,
W. J. KENNEDY.