

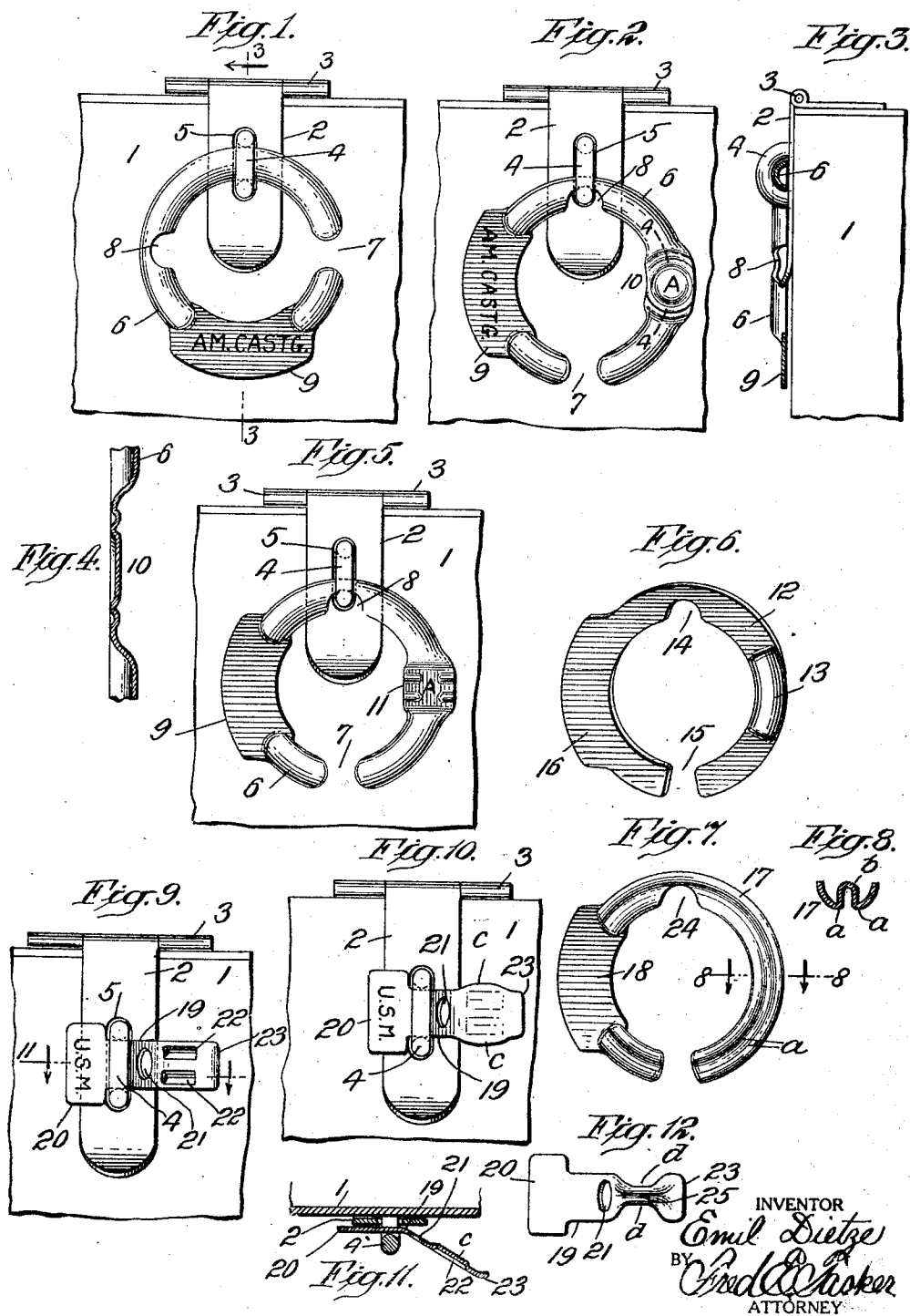
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HASP SEAL

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HASP SEAL.

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To all whom it may concern:

Be it known that I, EMIL DIETZE, a citizen of the United States, and resident of Richmond Hill, in the borough of Queens, in the county of Queens, city and State of New York, have invented certain new and useful Improvements in Hasp Seals, of which the following is a specification, reference being had therein to the accompanying drawing.

My present invention relates to a locking seal for security purposes and to guard against pilfering and unauthorized entry; the special class of such devices in this instance including metallic or steel seals designed for boxes, receptacles, or other holders or containers that are ordinarily fastened or locked by means of a hasp and staple. In applying my improved seal device to locking means of this kind the seal itself constitutes the member which passes through the eye or loop of the staple in effecting the interlocking of said hasp and staple, such seal therefore being a substitute for the ordinary pin, bar, or padlock, used with the loop of the staple; and after the seal has been inserted through the staple and against the hasp or clasp which overlaps the staple, a sealing impression is suitably imparted to said sealing member by means of a press or other mechanical implement in order to so spread or distort the inserted portion of the sealing member as to render the seal non-withdrawable from the staple and entirely non-removable therefrom except by breaking, whereby it becomes impossible to remove and replace the seal intact, and thus any removal which may be attempted of the seal will necessarily involve its destruction beyond the possibility of reuse. As the sealing member or seal may partake of a variety of different forms, as I shall show, being either straight or curved, it will be readily manifest that it may be applied to a great variety of hasps or clasps, or locking mechanisms having a loop element, and a slotted element engaging the loop element, but requiring another element to maintain such engagement, and this latter is served by the seal of frangible material and consequently a thorough protection. And the invention, therefore, comprises es-

entially the construction, arrangement and combination of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawing illustrating my invention;

Figure 1 is a front elevation of my improved seal for hasps and clasps, of the ring pattern, and shown as partially introduced into the staple.

Figure 2 is a front elevation of the same when the ring seal member is introduced sufficiently far through the staple to enable it to be hung or pivoted on the latter and thus serve as a handle, and shows the sealing impression imparted thereto to prevent non-withdrawal.

Figure 3 is an edge view of the device shown in Figure 1, with a portion of the same sectioned to indicate how closely the cross-section of the seal member corresponds to the form of the loop of the staple.

Figure 4 is an enlarged cross-section of the same form of ring seal, taken on the line 4, 4, of Figure 2.

Figure 5 is a front elevation of the same style of seal member with a different kind of sealing impression or identification mark applied thereto, the seal being in the position in which it is indicated in Figure 2.

Figure 6 is an alternate form of the circular seal, being mainly flat, with a short half round portion sufficient only for the imposition of the seal.

Figure 7 is another alternate form of the circular seal, showing a plurality of corrugations or ridges.

Figure 8 is a cross-section on the line 8, 8, of Figure 7.

Figure 9 is a front elevation of a modification of my improved seal in which it assumes an elongated as distinguished from a round form, and in this figure the sealing member is shown introduced through the staple before the sealing effect has been produced by the press.

Figure 10 is a similar view after the sealing members have been pressed and expanded.

Figure 11 is a horizontal section on the line 11, 11, of Figure 9.

Figure 12 is a detail view of the straight or elongated seal member, similar to that

shown in Figures 9 and 11, but sealed by compressing the edges together instead of the top and bottom as in Figure 10.

Similar characters of reference designate corresponding parts throughout all the different figures of the drawing.

1 denotes a box or receptacle for cash, valuables, or the like, the same being merely indicated as a specimen in outline. It has a hasp 2, consisting of a short clasp plate or strap, which is hinged at 3 to the lid or cover of the box, said hasp 2 being vertically slotted at 5, to receive the staple or loop 4 that is fastened rigidly to the wall of the box 1. Said box 1 represents only an example of a great variety of receptacles or compartments employing a hasp fastener with some form of loop or staple for locking purposes, which staple generally has some kind of a ring or locking contrivance passed through the same, or a pin, or a padlock, the effect of which will be to keep the hasp in position over the staple. Examples of compartments or receptacles thus secured are safe deposit boxes, cash drawers in slot-machines and pay-telephones, mail-bags and pouches of various kinds, and multiplied other forms, including skeleton frames, shipping crates, packing boxes, and indeed anything to which a hasp and staple in many forms may be applied; and it will be evident that the hasp and staple may vary within very widely separated limits in order to accommodate them to supply an effective fastener; and I therefore reserve the liberty of distributing the use of my improved seal very extensively.

As I have said, in the usual hasp and staple as commonly known, a pin or padlock passes through the staple loop and keeps the hasp from being removed from the loop. In my present improvement, for said pin or padlock, I substitute a headed sealing element, the inserted portion of which, after insertion, is sealed or expanded and provided with inscriptions if desired, so as to protect against removal and loss.

The locking means which passes through the staple 4, or its eye or loop, partakes of a great variety of different forms for different purposes, uses, and locations, and after being inserted in position has its inserted end subjected to the application of a seal press which will upset, flatten, spread, or bulge, said end and impart a sealing impression or legend thereto, so that this end cannot be withdrawn from the staple without breaking said sealed portion. In Figures 1, 2, 3, 4, and 5 this member consists of an incomplete ring 6, having an opening at 7 left between its ends. In Figure 6 the ring is mainly flat with a short half round portion; and in Figure 7 the ring is corrugated with twin ridges. In Figures 9, 10, 11, and 12 the sealing member is elongated

and either straight from end to end or bent. These forms I will now proceed to separately describe, it being evident that I am not restricted to them, but may apply the invention to many other equivalent or slightly modified forms, all of which will accomplish similar beneficial results.

The circular or incomplete ring form, as shown in Figures 1, 2, 3, and 4 is stamped out of sheet metal so as to be curved or semi-circular in cross-section for most of its length, an open space being left at 7 between the ends, so that one end of this ring 6 may be passed through the staple 4 after the hasp 2 has been shut down over the staple; and when so passed through the staple the ring can be adjusted into any position which will enable a portion of the same to be compressed and spread or raised between the jaws of a seal press or other implement. One section 9 of the ring 6 is enlarged or formed like a broad or flat pad or some similar shape, so that some suitable marking as for example a name or number may be indicated thereon; and this section being larger than the cross-section of ring 6, which fits the inside of loop 4, will prevent one end of the ring from passing through the loop 4, for the cross-sectional area of the ring, see Figure 3, is closely adjusted to the loop of the staple, enabling the ring to slide easily through it but not too loosely. Further, ring 6 has an inner notch or indent 8, usually curved, which is adapted when the ring has been passed through the loop far enough, to engage said loop 4 and thus pivot the ring on the loop, see Figure 2, whereby the ring is normally centered, permitting it to hang in a position where the opening 7 is opposite to the staple 4. When the ring member is in this position it may be used as a handle to pull the cash box forward out of its enclosing frame and give access thereto. The indent 8 further weakens the ring or seal member at one point, and permits the ring when the notch 8 is disengaged from the staple 4, to be broken at the notch point if it is desired to break the seal, which breaking is done by simply disengaging the indent from the staple and then twisting the ring torsionally in the fingers until it breaks and snaps off. The end of seal member 6 that is passed through staple 4 is compressed at 10 in any suitable press and with any suitable character of impression, and some marking or identification inscription, as "A," may be placed thereon to distinguish the seal, which in this case, by referring to Figure 2 and the enlarged section in Figure 4, is seen to consist of two or three circular ridges formed on a flattened surface which spreads the half round shape of the metal of ring 6 out on both sides so as to expand it into a wider form in order that it cannot be returned in-

tact through staple 4. The seal is therefore made complete and effective and the only way to open the lock is to break the seal, which of course cannot be replaced entire, and hence the stealing is prevented.

Another style of sealing means on the sealing member is shown in Figure 5. Here the sealing effect consists of several parallel struck up ribs or corrugations on a flat area, as 11, with a symbol or character "A" between the ribs; thus widening and raising the surface of the ring so that it will block any return through the staple.

Another alternate form of invention shown in Figure 6 belongs to the ring or incompletely circular type and is only slightly modified from the form given in Figures 1-5. The main ring member 12 has an opening 15 between its ends and a notch or indent 14 for pivoting and breakage purposes, and also the widened pad or panel 16 acting as a stop against extreme insertion; but the ring itself is of flat steel instead of the half round or semicircular struck up form of the main length of the ring as shown in Figures 1-5, except in one short section 13 which is of a half round or similar shape and is only large enough to provide sufficient material to enable the press to flatten or expand it into a swelling seal impression similar to that at 10 or 11, which will prevent the withdrawal of the seal intact from the staple.

Another alternate form which I have shown in Figure 7 and 8 is quite like that in Figures 1-5 except that in lieu of being struck up or shaped in a single semicircular or half round form, the ring 17 is shaped with two or more twin corrugations *a, a*, with a channel *b* between them. This form has the notch 24, the pad 18, the space between the ends of the ring, the same as the other form, and is adapted to have the seal press upset and expand the ring at a certain point in like manner as in Figures 1-6, but it will be found that oftentimes the twin or multiple corrugations will provide a superior expanded or flattened effect for the seal and afford additional security.

In Figures 9-12 we pass from the round seal to a substantially straight or bent form of the device, without material change of function, and a general equivalency of effect and advantage in every way, the only real difference being, so far as the broad idea is concerned that we provide in a straight bar that which in the other figures is found in a curved bar, but in each case the bar or member is inserted through the staple and the inserted end seal pressed. 19 denotes a form of straight bar or pin which is thrust through the staple 4, said bar having a head 20, similar in function to the

pad 9 and which carries an inscription thereon if desired and acts as a stop to abut against the staple 4 to hold the bar from passing clear through. Bar 19 may be entirely straight or may have a bend in it which will project the inserted end off at an angle as shown in Figures 9 and 11 to form a handle, the tip 23 of which is preferably curved. Also the bar 19 has struck up members, as for example a pair of short corrugations 22, 22, which will furnish a raised structure on which the seal press may operate and flatten the same into the spread out edges *c, c*, if the press is applied to the opposite flat sides of member 19, which application is more conveniently performed if the inserted end of the steel member is bent outwardly as in Figure 11; or if the press is applied to the opposite edges, said edges will be squeezed together inwardly after *d, d*, as in Figure 12 and will thus raise the intermediate corrugations 22 into the elevated compression 25; it being noted that either the flat spread edges *c, c*, or the compacted mound formed at 25 will present obstructions to the return of the sealing device through the staple without first breaking it. Evidently, the seal press in its action may provide inscriptions or identification marks to the compressed corrugations 22 or the raised structure 25. Further, the slot 21 is cut in the bar 19 to weaken the same, having thus the same weakening effect as notch 8, so that when desired a twisting of the bar will break it and enable it to be detached from the hasp and staple. Hence a straight in lieu of a curved sealing member will be found to be of great advantage for certain uses to which it will be more conformable than the curved or circular form as for example with certain classes of mail pouches, but obviously I reserve the liberty of changing the details of shape and size very widely and easily, provided the sealing idea is retained as I have explained it.

Having thus described my invention, what I claim as new and desire to secure by Letters Patents, is:—

In a device of the class described, sealing means for use with a hasp and loop, the same consisting of a seal passing through the loop against the plate, said seal being a ring of corrugated steel with a name section, a frangible section, and a notched portion serving as a pivot, and with its free end adapted to be compressed mechanically to provide a sealing impression with identification symbols.

In testimony whereof I hereunto affix my signature.

EMIL DIETZE.