

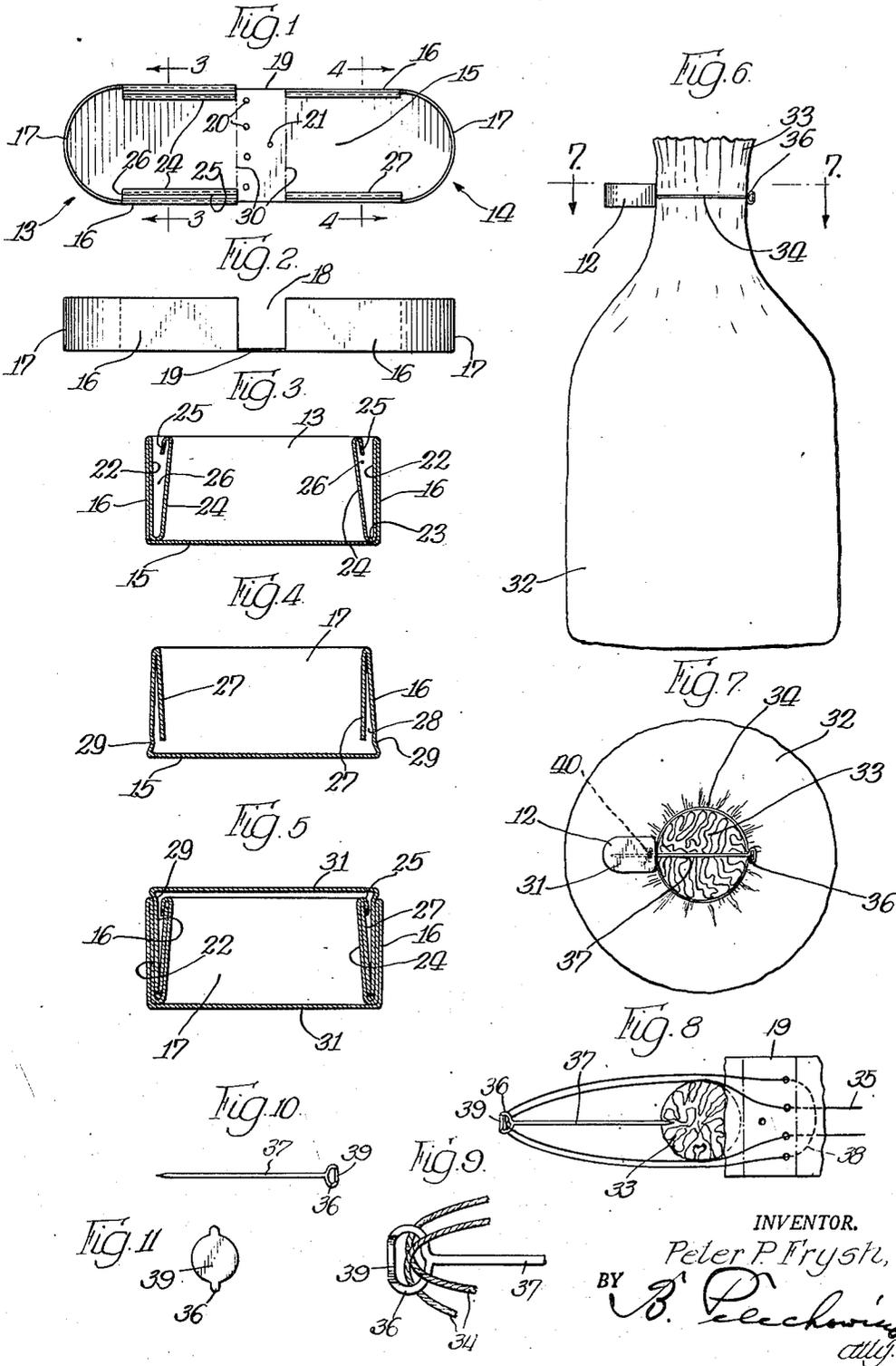
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BAG SEAL

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BAG SEAL

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The present invention relates to bag seals, and has for its main object the provision of a casing composed of two interlocked sections, and within which casing a knot of a cord encompassing the neck of a bag, is enclosed.

A still further object of the present invention is the provision of a seal of the character indicated, with cooperating means for preventing the cord loops encompassing the neck of the bag from being disengaged therefrom by sliding the loop longitudinally of the neck of a bag.

A still further object of the present invention is the provision of a seal of the character indicated wherein the knot of a cord encompassing the neck of the bag is enclosed, the loop of which cord is passed through an eye of a pin, the latter pierced through the neck of a bag and engaged with the seal, for the purpose of preventing the cord loop from being disengaged from the neck of a bag.

With the above general objects in view and others that will appear as the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claims.

In the drawing forming a part of this application, and in which like designating characters refer to corresponding parts throughout the several views;

Fig. 1 is a top elevational view of two sections of a seal before the same are interlocked to form a seal casing;

Fig. 2 is a side elevational view thereof;

Fig. 3 is an enlarged transverse cross-sectional view of one part of the seal, taken on line 3—3 of Fig. 1;

Fig. 4 is an enlarged cross-sectional view of the other part of the seal, before the same is interlocked with the former, the view having been taken on line 4—4 of Fig. 1;

Fig. 5 is an enlarged transverse cross-sectional view through the seal when the two parts aforesaid have been interlocked;

Fig. 6 is a side elevational view of a bag, including the neck thereof, with the seal in an operative position with the latter;

Fig. 7 is a transverse cross-sectional view through the neck of a bag, showing in elevation the seal, the cooperating pin and cord loops encompassing the neck of the bag, the view having been taken on line 7—7 of Fig. 6;

Fig. 8 is a diagrammatic view of a cord passed through an eye of a pin, and a wall of the seal,

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with the loose loops of the cord encompassing the neck of a bag preparatory to the cord loops being tightened and the ends of the cords knotted and preparatory to the driving of the pin transversely through the neck of a bag;

Fig. 9 is an enlarged plan view of the pin with several strands of loops of cord passed there-through preparatory to the tightening of the cord around the neck of a bag;

Fig. 10 is a side elevational view of the pin cooperating with the seal; and

Fig. 11 is an enlarged elevational eye end of the pin.

Referring in detail to the present drawing the ultimate seal 12 embodies a pair of sections or parts 13 and 14, which, when interlocked, define the casing of seal 12. Said parts 13 and 14 have a common, oblong, bottom wall 15, the ends of which are of arcuate formation. Integrally formed with said bottom wall 15 is a side wall cooperating with each of said parts 13 and 14. Said side wall includes straight parallel portions 16 connected with arcuate portions 17 in each of said parts 13 and 14. Bottom wall 15 cooperating with part 13 is wider than the end thereof cooperating with part 14 for the purposes hereinafter stated. Wall portions 16 of each part 13 and 14 are spaced, effecting recess 18, with the resultant free, central bridge 19 in said bottom wall 15, which said bridge 19 in the ultimate formation of seal 12, when parts 13 and 14 are interlocked, will constitute one end wall in said seal 12.

Said bridge 19 adjacent part 13, and in a transverse relation with said bottom wall 15 is provided with a row of four apertures 20 and with aperture 21 adjacent part 14 and centrally of said bridge 19 at the opposite side thereof, for the purpose hereinafter specified.

Each straight wall portion 16 of part 13 is doubled upon itself as at 22, down to bottom wall 15, and bent at its lower termination, and adjacent said bottom wall 15, as at 23, and from that point directed upwardly in a slanting direction for effecting leaf 24, and thereupon bent toward doubled portion 22 for effecting comparatively short lip 25, which overhangs V-shaped recess 26 resulting from said doubled up portion 22 of wall portion 16, and leaf 24.

Each of straight wall portion 16 of part 14 of the seal are inwardly bent with the resulting depending leaf 27, the free ends of which are spaced away from bottom wall 15, as is clearly seen in Fig. 4. Each side wall portion 16 of part 14 is inclined towards the longitudinal center of

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part 14, and each cooperating leaf 27 is directed in a perpendicular manner with respect to bottom wall 15, so that wall portions 16 with their cooperating leaves 27 define V-shaped recesses 28, the apex of each of which coincides with the free ends of said wall portions 16, and the wider ends of which are adjacent said bottom wall 15.

Along the base of each side wall portion 16 of part 14, adjacent bottom wall 15 each of said side wall portions 16 is inwardly bent for defining grooves 29 coextensive with the length of said side wall portions 16, for the purpose hereinafter stated.

Bridge 19 along its sides, and adjacent parts 13 and 14 is creased as at 30 for facilitating bending bottom wall 15 along said creases 30 so that in the ultimate formation of seal 12 said creases 30 will constitute corner points from which bridge 19 and the adjacent ends of bottom wall 15 will extend in a perpendicular mutual relation, and the two ends of bottom wall 15 will remain in parallel relation and will then define faces 31 of seal 12.

When said parts 13 and 14 are shifted towards each other when bottom wall 15 is bent along creases 30 as aforesaid, the apexes defined by side wall portions 16 and their depending leaves 27 will enter recesses 26 of part 13 and further forcing of part 14 into part 13 will shift said last named side wall portions 16 and their leaves 27 downwardly within recesses 26 of part 13, during which shifting process leaves 24 with lips 25 are deflected away from doubled up wall portions 22, until said apexes reach angles 23 defined by said doubled up wall portions 22 and leaves 24. When in that position leaves 24 with their lips 25 will spring back into their normal position, with lips 25 overhanging the free ends of leaves 27 and in alignment with the inner faces of the latter, by virtue of which action said lips 25 will straddle the free ends of said leaves 27, thereby interlocking part 14 of seal 12 with part 13 thereof, preventing disengagement of the two parts of the seal, unless the seal is damaged or destroyed. When the two parts of seal 12 are interlocked, as is seen in Fig. 5, the free ends of said wall portions 16 with their doubled up walls 22 will repose within grooves 29. Since end of bottom wall 15 of part 13 is wider than the corresponding end of said wall 15 adjacent part 14, there is no difficulty of accommodating the interlocking parts of said wall portions 16 of said part 14 with the corresponding interlocking parts of said part 13 of the wall, as is seen in Fig. 5. It is further observed that the arc of end wall portion 17 of part 13 is of a larger diameter than the corresponding arc of end wall portion 17 of part 14, so that when the two parts are in an interlocked condition, defining the seal casing, the arcuate end wall 17 of part 14 reposes within the arcuate end wall 17 of part 13 and contacts its inner periphery.

The seal is made preferably out of metallic resilient material or of plastic so that leaves 24 are capable of being deflected away from the doubled up walls 22 during the shifting of side wall portions 16 with leaf 27, and being capable of springing back into the original position for causing lips 25 to enter recesses 28 when overhanging the free ends of leaves 27. For permitting clearance for said lips 25 when they spring into ultimate operative position past leaves 27 the latter are spaced away from their cooperating bottom wall 15.

From the hereinabove description it will be seen that once said parts 13 and 14 are interlocked

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for forming the casing of seal 12, it is impossible to have access into the interior thereof, without destroying, disfiguring or damaging seal 12. Thus the cord knot reposing within seal 12 cannot be untied unless seal 12 is either broken or the strand of the cord remaining outside of the seal is cut.

The seal herein disclosed is intended for use in connection with containers, such as fabric bag 32, adapted to receive valuables, with the open end of the bag formed into a constricted neck 33.

After the contents have been deposited into bag 32 with the open end thereof folded into compact neck 33, double loops 34 of cord 35 are encompassed around neck 33. Said double loop 34 is made by passing free ends of cord 35 through a pair of outermost apertures 20, then the ends thereof are passed through eye 36 of pin 37 and there crossed, as is seen in Fig. 9, and thereupon said ends are extended through the innermost apertures 20, as is seen in Fig. 8. When loop 34 is performed as hereinabove stated, and as shown in Fig. 8, a portion of a bight of one strand of said loop 34 will face or overlie the inner face of bridge 19, as at 38, with the remaining portions of double loop 34 remaining around neck 33 and outwardly of the outer face of bridge 19. When double loop 34 is performed, as shown in Fig. 8, with two free ends of cord 34 passed through the innermost apertures 20, and with the two strands of loop 34 passed through eye 36 and there crossed, thereupon pin 37 is driven into and pierced transversely of neck 33 and in a substantially diametrical relation therewith. Flattened outer portion of eye 36 defines head 39 which facilitates the application of manual pressure thereat for driving pin 37 through said neck 33. When said pin 37 has entirely pierced neck 33, the free sharp point thereof is inserted into aperture 21 and shifted outwardly of bridge 19 as far as it will go. During this operation bridge 19 by its outer face is contacted with neck 33. Pin 37, remaining within aperture 21 will frictionally support said bridge 19 as well as parts 13 and 14, and thereupon free ends of cord 35 are pulled to eliminate any slack in double loop 34, and thereupon said free ends of cord 35 are tied into knot 40 shown in dotted lines in Fig. 7. When this is accomplished the two parts 13 and 14 are bent along creases 30 for interlocking the same as hereinabove described and for providing closed seal 12. From the hereinabove description it will be seen that the inner free end of pin 37 when in an ultimate operative position with respect to seal 12, remains within said seal 12, as is indicated by dotted lines in Fig. 7, being extended thereinto through said aperture 21 made in bridge 19. Said seal 12 in its ultimate interlocked condition contacts with the adjacent point in the periphery of neck 33, as is seen in Figs. 6 and 7.

From the hereinabove description it will be apparent that once two parts 13 and 14 of the seal have been interlocked, no access may be had to knot 40 within seal 12 for untying the same or for tampering therewith. It will also be seen that pin 37 when pierced through neck 33 with its free sharp end remaining within seal 12 cannot be removed from said neck 33, because double loop 34 maintains it in that operative position due to the engagement of loop 34 with eye 36. Thus, when said pin 37 is pierced through neck 33 with loop 34 in a tight condition therearound, pin 37 cannot be shifted trans-

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versely in either direction, because eye 36 does not permit it shifting towards seal 12, and loop 34, in engagement with eye 36, does not permit it to shift into the opposite direction.

From the hereinabove description it will also be seen that loop 34 cannot be shifted along neck 33 and longitudinally thereof, because such shifting is prevented by said loop 34 being in engagement with eye 36.

Therefore the only way that access may be had into bag 32 is to break cord 35 along one or both strands of loop 34. A person without authority doing this would of course be charged with breaking the cord. There is no way of effecting access into bag 32 through tampering with seal 12 in an attempt to open the same, because once two parts 13 and 14 are interlocked, the same may not be opened short of breaking or destroying the same.

While there is described herein a preferred embodiment of the present invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What I claim as new is:

1. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, an eye integrally formed with one end of said pin, a cord loop adapted for encompassing said neck, said loop being passed through said eye, a seal casing, the free end of said pin being passed into said casing for engaging the same therewith, the ends of the cord defining said loop being passed into said casing and knotted therewithin, and means for rendering the interior of said seal casing inaccessible after the ends of said cord having been knotted therewithin.

2. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, an eye integrally formed with one end of said pin, a cord loop adapted for encompassing said neck, said loop being passed through said eye, and a seal casing, the free end of said pin being passed into said casing for engaging the same therewith, the ends of the cord defining said loop being passed into said casing and knotted therewithin, said casing being composed of a pair of complementary interlocking sections affording access to the interior thereof for tying said knot, and preventing access to the interior thereof for tampering with said knot when said sections become interlocked.

3. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, an eye integrally formed with one end of said pin, a cord loop adapted for encompassing said neck, said loop being passed through said eye, a seal casing embodying a pair of sections, and means for interlocking said sections, the free end of said pin being passed into said casing for engaging the same therewith, the ends of the cord defining said loop being passed into said casing and knotted therewithin before the two sections thereof are interlocked.

4. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, an eye integrally formed with one end of said pin, a cord loop adapted for encompassing said neck, said loop being passed through said eye, a seal casing embodying a pair of sec-

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tions, and means for interlocking said sections, the free end of said pin being passed into said casing for engaging the same therewith, the ends of the cord defining said loop being passed into said casing and knotted therewithin before the two sections thereof are interlocked, said casing being in contact with said neck at a point substantially diametrically opposite from said eye.

5. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, a cord loop adapted for encompassing said neck, means at one end of said pin for engaging said loop, a seal casing, the opposite end of said pin being passed into said casing, the ends of the cord defining said loop being passed into said casing and knotted therewithin for maintaining the neck in a tied condition and said pin in a rigid position relative to said casing, and means for rendering the interior of said seal casing inaccessible after the ends of said cord having been knotted therewithin.

6. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, a cord loop adapted for encompassing said neck, means adjacent one end of said pin for engaging said loop, a seal casing embodying a plurality of sections, and means for interlocking said sections, the opposite end of said pin being passed into said casing, the ends of the cord defining said loop being passed into said casing and knotted therewithin before said sections have been interlocked for the purpose of maintaining said loop in a tight relation with said neck and said pin in a rigid position relative to said casing.

7. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, a cord loop adapted for encompassing said neck, means at one end of said pin for engaging said loop, a seal casing, said seal casing having a wall with an opening therein receiving the opposite end of the pin, and having additional openings in said wall receiving the cord loop for securing the loop about the neck, said cord loop having a knotted end retained in the casing and abutting against the inner face of said wall, and means for rendering the interior of said seal casing inaccessible after the ends of said cord having been knotted therewithin.

8. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, a cord loop adapted for encompassing said neck, means at one end of said pin for engaging said loop, and a seal casing, said seal casing having a wall with an opening therein receiving the opposite end of the pin, and having additional openings in said wall receiving the cord loop for securing the loop about the neck, said cord loop having a knotted end retained in the casing and abutting against the inner face of said wall, said seal casing having a plurality of sections arranged to confine the knotted end of the cord loop therein, and means for interlocking said sections together in said confining relation.

9. A sealing device for the mouth of a container when gathered into a constricted neck, comprising a pin adapted to be pierced through said neck, a cord loop adapted for encompass-

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ing said neck, means at one end of said pin for engaging said loop, and a seal casing, said seal casing having a plurality of sections connected together by an end wall forming a closed end for said seal casing, said sections having surrounding sides arranged in interlocking relation, said end wall having an opening therein receiving the opposite end of the pin, and having additional openings in said wall receiving the cord loop, said cord loop having a knotted end retained in the casing and abutting against the inner face of the wall.

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