Feb. 15, 1938. L. J. BARWOOD 2,108,327

LOBSTER CLAW LOCK

Filed Aug. 16, 1935

Fig. 1.

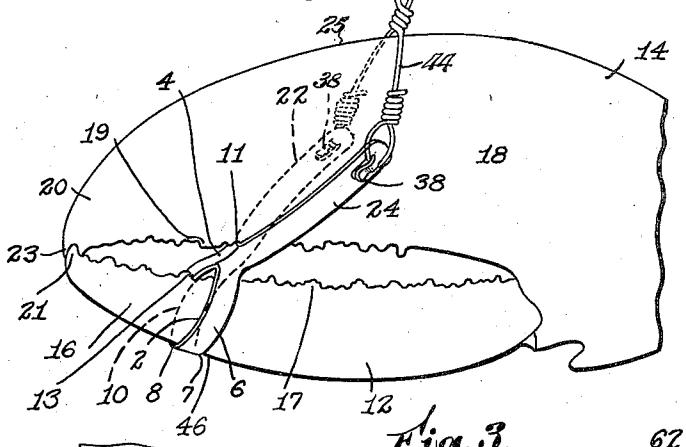



Fig. 2.

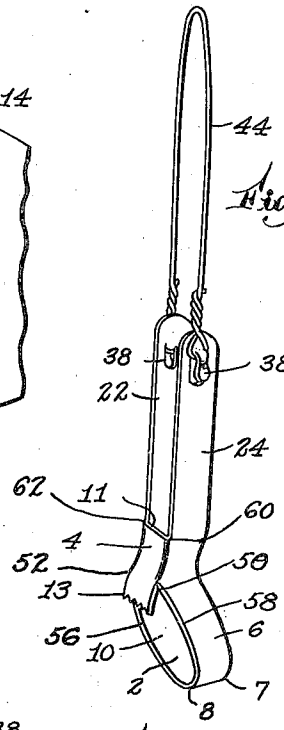



Fig. 3.

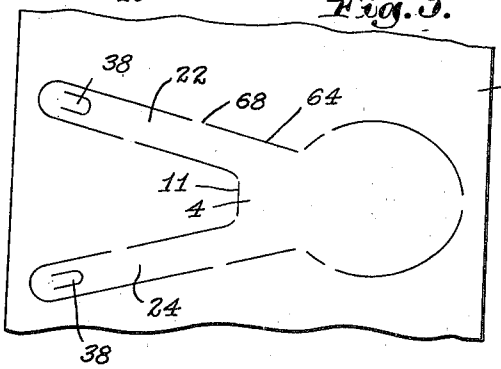



Fig. 4.




Fig. 5.

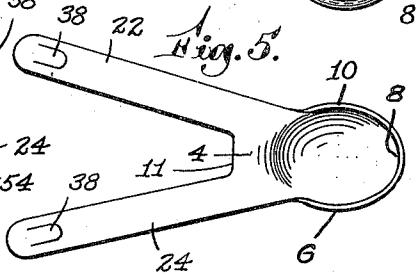



Fig. 6.

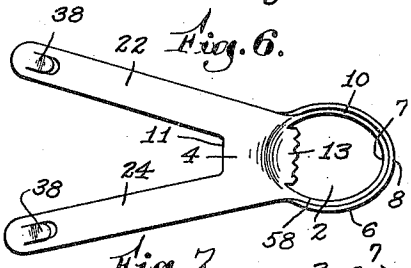



Fig. 7.

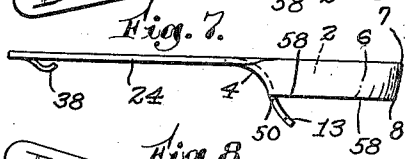



Fig. 8.

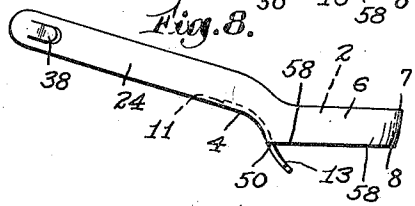
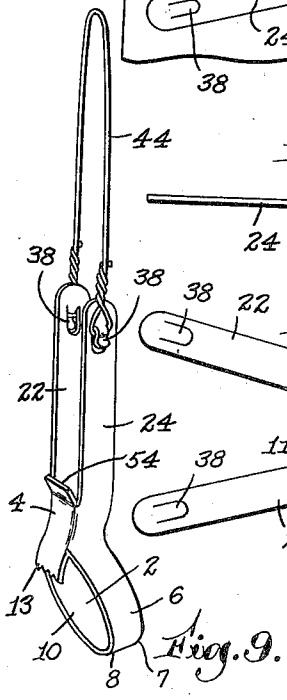



Fig. 9.




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## LOBSTER CLAW LOCK

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Application August 16, 1935, Serial No. 36,490

6 Claims. (Cl. 17—1)

The present invention relates to claw locks and methods of making the same, and more particularly to lobster-claw locks such as are illustrated and described in Letters Patent 1,997,711, granted April 16, 1935.

An object of the invention is to improve upon locks of the above-described character, to the ends of simplifying their construction and reducing their cost of manufacture. Other objects will be explained hereinafter and will be particularly pointed out in the appended claims.

The invention will now be explained in connection with the accompanying drawings, in which Fig. 1 is a view in elevation of a lobster leg, with the claws thereof locked by a claw lock according to one embodiment of the present invention; Fig. 2 is a perspective of the claw lock shown in Fig. 1, before attachment to the lobster claws; Fig. 3 is a plan of a sheet-metal blank from which the lobster-claw lock of the present invention may be manufactured, the blank being shown cut prior to a dieing operation; Fig. 4 is an elevation and Fig. 5 a plan of the same blank after treatment; Figs. 6 and 7 are views corresponding to Figs. 5 and 4, respectively, after further treatment; Fig. 8 is a view similar to Fig. 7 after still further treatment, to produce the claw lock shown in Figs. 1 and 2; and Fig. 9 is a perspective, similar to Fig. 2, of a modification.

The novel lock of the present invention is constituted of a sheet-metal structure, in the form of a U, with the neck of the U constituted of a wall 8 and the arms of the U constituted of walls 6 and 10 merging smoothly in the wall 8 and continuing into arms or walls 24 and 22, respectively. The inner faces of the walls 6 and 10, as of the walls 22 and 24, are disposed opposite to each other and are convexly bent outward from the wall 8, as shown, and then inward, towards corresponding points 50 and 52 of correspondingly disposed edges 56 and 58 of the arms of the U. At the points 50 and 52, the edges 56 and 58 of the arms of the U are connected by a piece of metal, constituting a wall 4. The wall 4 is shown flat, and disposed in a plane at right angles to the walls 6 and 10. An opening 2 is thus formed between the walls 4, 6, 8 and 10. A tongue 13 is shown projecting out from one edge of the wall 4 over the opening 2, towards the neck wall 8 of the U. The opposite edge 11 of the wall 4 merges at 60 and 62 in the edges 56 and 58 of the walls 22 and 24. The oppositely disposed walls 22 and 24 may, like the walls 6 and 10, be curved inward toward each other, but it is preferred to have them flat.

The wall 8 is adapted to be positioned contiguous or adjacent to or on a claw 12 of a lobster leg 14 with the end 16 of the claw 12 extending through the opening 2, and with the tongue 13 contiguous to, and engaging, the inner, toothed edge 17 of the claw 12. The opening 2 is large enough to receive the end 16 of one claw 12 only, and not large enough to receive both claws. The opening 2 is of such a size that the end 16 of the claw 12 can not be inserted into this opening 2 by a direct thrust, from right to left, as viewed in Fig. 1. It can be inserted only by tilting the claw. The arms 22 and 24 extend along the sides of the claw 18.

The edge 11 of the wall 4 is adapted to be positioned contiguous to or on the inner, toothed edge 19 of the other claw 18 of the leg 14. If desired, it may be provided with a tongue 54, as shown in Fig. 9. One or both of the tongues 13 and 54 may be toothed. The wall 4 is thus disposed between the contiguously disposed claws 12 and 18. The wall 4 is preferably of small enough width so that the claws 12 and 18 shall occupy their normal position, with the hooked tip 23 of the end 20 of the claw 18 positioned near to, and preferably in contact with, the hooked tip 21 of the end 16 of the claw 12. The claws will thus be locked closed. The wall 4 may, however, if desirable, be made wider, so as to hold these hooked tips 21 and 23 separated. The claws will thus be locked open. Whether the claws are locked closed or open, therefore, depends upon the width of the wall 4 and its location with respect to the teeth of the toothed edges 17 and 19. The degree of opening of the claws may be varied within limits. If the wall 4 is positioned close to the tips 21 and 23, the claws may be locked very slightly open; if it is positioned as illustrated, the claws may be locked closed, as shown. It is usually desirable to position the lock substantially as illustrated, with each of the parts 11, 13 and 54 engaging between the teeth of the toothed claw edges 17 and 19 adjacent to the extreme ends 21 and 23 of the claws. The result is a minimum of discomfort to the lobsters, without injuring any of the meat, while, at the same time, absolutely assuring that the claws will always be locked.

A portion of each of the arms 22 and 24 is intermediately struck out therefrom to constitute a hook 38, or it may be punched out. The ends of a wire 44 may be passed under the hooks 38, or into the said punched-out openings, and then twisted, as illustrated in Fig. 1. The wire 44 extends over the convex outer edge 25 of the claw 18. The claws are thus locked in position, with the wall 4 interposed, as illustrated. Any tendency of the wire 44 to slide down toward the end 20 of the claw 18 is resisted by the edge 7 of the wall 8 engaging the outer edge 46 of the claws 12 opposite to the toothed side 17. It may be resisted, also, in some cases, depending upon the relative dimensions of the parts, by the tongue 13 engaging the toothed edge 17 of this claw 12. If the dimension of the opening 2, in the direction

from the tongue 13 to the wall 8, is made smaller than the width of the claw 12, from the tip 21, to the outer edge 46, there will be no possibility of the lock slipping off the claw 12 in a direction toward the left, as viewed in Fig. 1.

It is preferred that the lock of the present invention, including the walls 4, 6, 8, and 10, and the straps, including the strap 44, be made of some non-corrodible metal, such as aluminum, stainless steel and the like. Ordinary steel may be employed, plated with cadmium or any other suitable substance.

A convenient method of making the lobster-claw lock of the present invention is first to cut a blank along the lines 64 in a sheet of metal 66, leaving small, connecting portions 68, as shown in Fig. 3. The blank thus cut along the lines 64 will contain the two arms 22 and 24, as well as a body portion that will later be formed into the part containing the opening 2. A U-shaped channel is first formed in this body portion, as illustrated in Figs. 4 and 5, by spinning, drawing, swaging, or otherwise deforming. This may be effected in several steps.

The bottom of the channel is next cut away, so as to produce the edges 56 and 58 of the rim of the channel, to form the opening 2. This last-named cutting step may be so effected as to leave the tongue 13 projecting from one side of the opening 2; and also, if preferred, the tongue 54. The wall 4 is left intact; being substantially the only portion of the sheet metal that is neither died nor cut. As a later step, the connecting portions 68 are severed to release the thus nearly completed lock, though the blank shown in Fig. 3 may, if desired, be cut along the lines 68 simultaneously with the formation of the before-mentioned U-shaped channel. The arms 22 and 24 are bent out of the plane of the blank sheet, so as to be disposed toward each other; and, at the same time, they are inclined upward, from the position of Fig. 7 to that of Fig. 8. The planes of the arms 22 and 24 are thus disposed at a substantial angle to the plane of the edges 56 and 58, which enables the edge 7 to engage securely against the edge 46 of the claw 12, as before described, and permits the arms 22 and 24 to assume a position of substantial incline on the jaw 14, as illustrated in Fig. 1.

Further modifications will occur to persons skilled in the art, and all such are considered to fall within the spirit and scope of the invention, as defined in the appended claims.

What is claimed is:

1. A lobster-claw lock having an opening for receiving a claw of a lobster leg, the opening having a wall that is adapted to be interposed between the said claw and the other claw of the leg, the lock being provided with a tongue projecting from the said wall for engaging an inner edge of the first-named claw, and means for locking the first-named claw in said opening and the second-named claw contiguous thereto with said wall interposed between the claws and with the tongue engaging the said inner edge of the first-named claw.

2. A lobster-claw lock having an opening and an edge, and means for securing a claw of a lobster leg in the lock with the end of the claw extending through the opening and with the other claw of the leg positioned contiguous to the said edge, the lock being provided with a tongue for engaging one of the claws.

3. A lobster-claw lock having an opening for receiving a claw of a lobster leg, the opening having a wall that is adapted to be interposed between the said claw and the other claw of the leg, the lock being provided with a tongue projecting from the said wall and having a toothed edge for engaging an inner edge of the first-named claw, and means for locking the first-named claw in said opening and the second-named claw contiguous thereto with said wall interposed between the claws and with the toothed edge engaging the said inner edge of the first-named claw.

4. A lobster-claw lock constituted of flat metal in the form of a U with the arms of the U having their flat sides oppositely disposed, intermediately disposed portions of the arms being curved inward toward each other, the lock having a flat piece of metal joining the said intermediately disposed parts of the arms at corresponding edges of the said flat sides, whereby an opening is formed between the neck of the U, the said piece of metal and the portions of the arms between the neck and the said piece of metal, the plane of the flat piece of metal being at a substantial angle to the plane of each of the arms, the opening being adapted to receive a claw of a lobster leg, a tongue projecting from one edge of the flat piece of metal towards the neck of the U and adapted to engage an inner edge of the said claw, and means for locking the said claw in the opening and the other claw of the leg between the other portions of the arms with the said piece of metal interposed between the claws and with the tongue engaging the said inner edge of the first-named claw.

5. A lobster-claw lock having an opening for receiving a claw of a lobster leg, the opening having a wall that is adapted to be interposed between the said claw and the other claw of the leg, the lock being provided with a tongue projecting from the said wall for engaging an inner edge of the second-named claw, and means for locking the first-named claw in said opening and the second-named claw contiguous thereto with said wall interposed between the claws and with the tongue engaging the said inner edge of the second-named claw.

6. A lobster-claw lock constituted of metal in the form of a U with the arms of the U oppositely disposed, intermediately disposed portions of the arms being curved inward toward each other, the lock having a piece of metal joining the said intermediately disposed portions of the arms at corresponding edges of the said sides, whereby an opening is formed between the neck of the U, the said piece of metal and the portions of the arms between the neck and the said piece of metal, the opening being adapted to receive a claw of a lobster leg with the said piece of metal interposed between the said claw and the other claw of the leg, and means for locking the first-named claw in the opening and the second-named claw contiguous thereto between the other portions of the arms with the said piece of metal interposed between the claws.

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