Feb. 23, 1943. A. S. HAISLIP 2,312,160

FISH HANDLING AND SCALING CLAMP

Filed Dec. 26, 1940 2 Sheets-Sheet 1

Fig. 1.

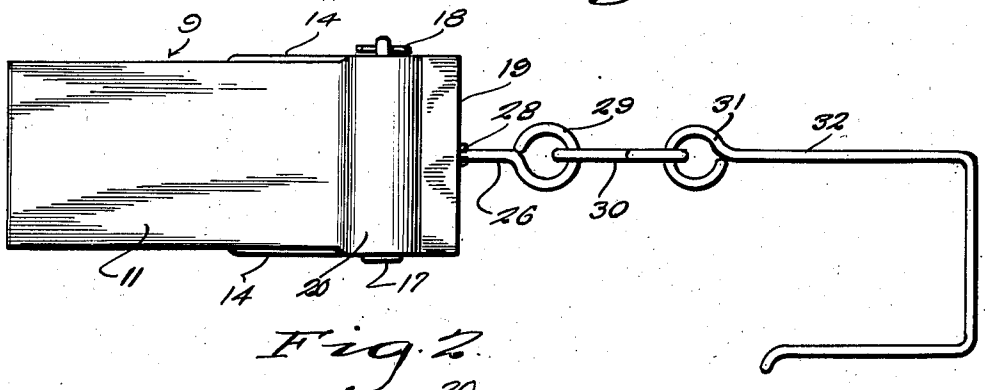


Fig. 2.

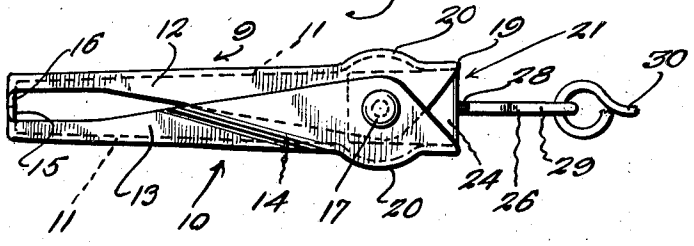


Fig. 3.

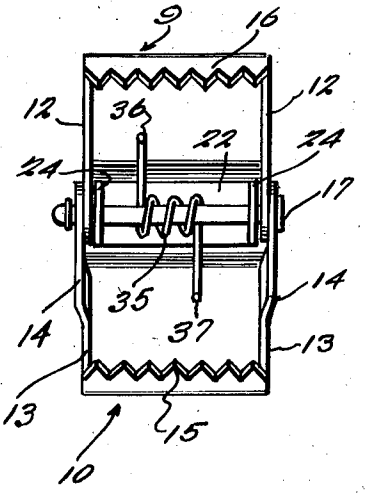


Fig. 4.

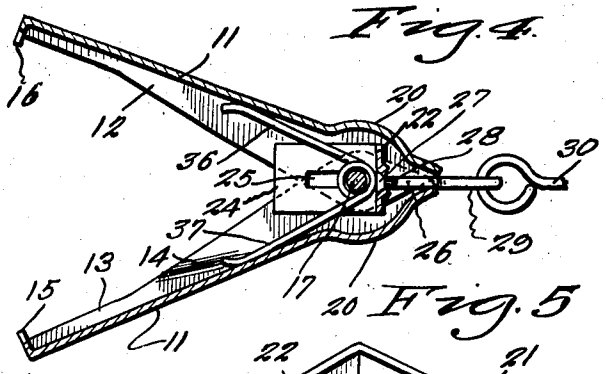
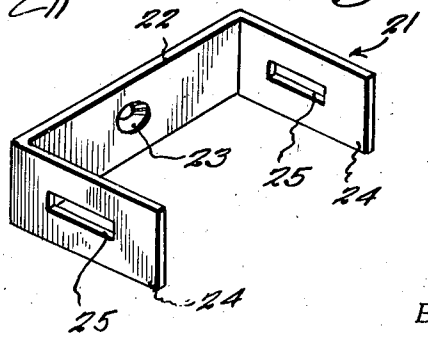


Fig. 5



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Filed Dec. 26, 1940 2 Sheets-Sheet 2

Fig. 6.

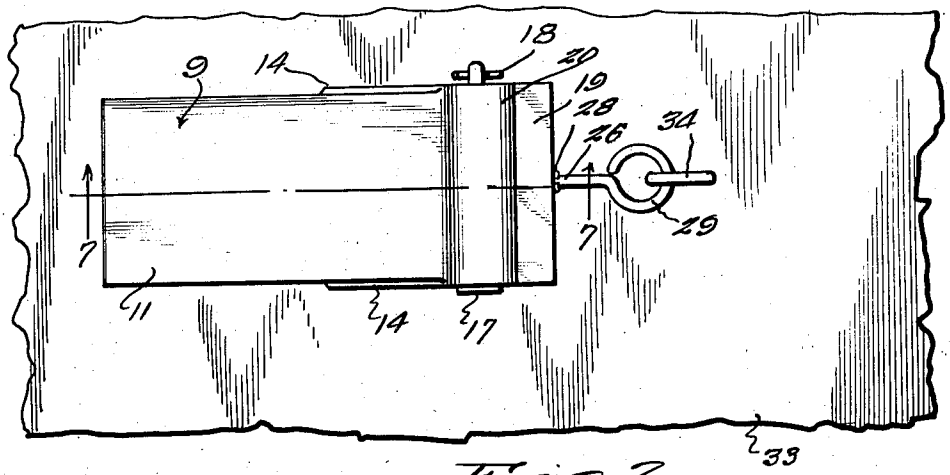


Fig. 7.

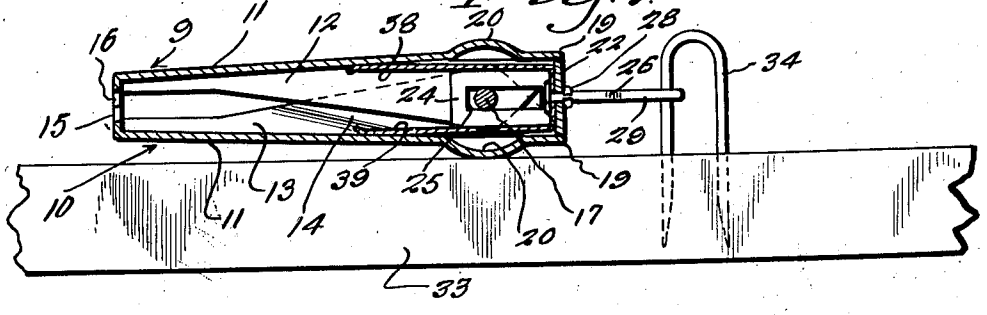
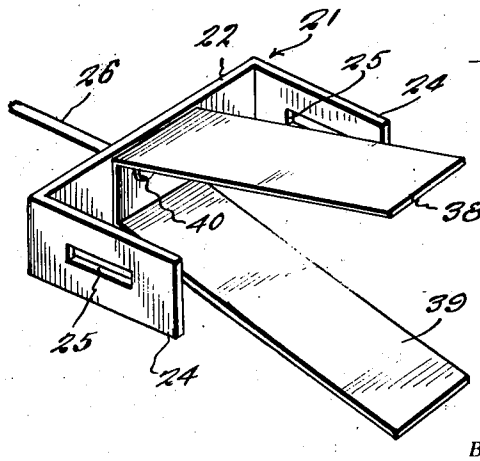


Fig. 8



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UNITED STATES PATENT OFFICE

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FISH HANDLING AND SCALING CLAMP

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Application December 26, 1940, Serial No. 371,769

5 Claims. (Cl. 17—8)

The present invention relates to an improved article clamping and holding device which is especially, but not necessarily, constructed and designed to effectively hold and anchor a fish in a manner to facilitate convenient and safe handling while scaling and butchering the same.

In carrying the invention into practical effect, I have evolved and produced a novel double jaw structure so made as to expedite and promote its use in the home, in a fish-market, on a fish pier or wharf, or wherever else it may be needed for expedient and efficient results.

Being generally familiar with angler's accessories and equipment, including marketed and patented fish clamps and holders, I am aware of what has been done along this reasonably well-developed line by my predecessors. It is therefore my judgment that, in reducing my invention to actual practice, I have designed and perfected an ingenious clamp construction possessed of appreciable distinctions and novelty in that it is characterized by correctly proportioned and structurally fashioned grappling jaws, these being pivotally interconnected and coacting with an intervening projectable and retractable lock unit somewhat in the nature of a chock, whereby to provide a well chosen combination and arrangement of parts admirably well adapted to satisfactorily achieve the desired results.

As is evident from the preceding observations, one phase of the invention has to do with the specific construction and arrangement of the parts forming the jaw unit, the arrangement being such that the jaws are pivotally connected with each other at points intermediate their ends, the fish engaging and clamping ends thereof being made with matching and abutting teeth, these being adapted to imbed themselves in the fish, and the opposite ends of the jaws being flat and straight across in transverse dimension and the coacting features being such that the jaws proper assume planes of strict parallel relationship when swung to closed fish clamping positions.

More specifically, additional novelty is predicated upon the adoption and use of a slide in the form of a yoke, this being of a projectable and retractable type and interposed between the jaws and slidably anchored on the hinge pin employed for assembling said jaws.

A further feature of construction has to do with the utilization of optional as well as alternative spring means so designed and arranged as to normally spread the jaws apart and keep the same constantly under the influence of said spring means.

Other features and advantages of the invention will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are employed to designate like mechanical parts throughout the same:

Figure 1 is a top plan view of a fish clamp constructed in accordance with the principles of the present invention showing anchoring means associated therewith, said anchoring means being essentially adapted for engagement over the edge of a table, whereby to render this particular form of the invention adaptable for domestic or household use.

Figure 2 is a side elevational view of the structure illustrated in Figure 1.

Figure 3 is a front end elevation showing the jaws in normal open positions.

Figure 4 is a central longitudinal sectional view through the structure seen in Figure 3 with parts in elevation.

Figure 5 is a perspective view of the so-called chock forming slide or lock.

Figure 6 is a view similar to Figure 1 showing a modification of the invention, this particular style of the device being adapted for use on a scaling block or bench such as employed in a fish market or the like.

Figure 7 is a longitudinal sectional view taken on the line 7—7 of Figure 6.

Figure 8 is a perspective view, similar to Figure 5, but showing the jaw opening spring mounted on the slide to constitute a part thereof.

By way of introduction to the detailed description it is to be pointed out that although there is a difference between the anchoring means shown in Figures 1 and 6 as modifications, the principal distinction between the two modifications is the optional or alternative spring means employed on different occasions. Since the jaw unit and the slide means are the same in both embodiments, the parts will be identified by corresponding reference numerals.

To facilitate achievement of the foregoing purposes attention is first called to Figures 1 to 5 inclusive. The clamp or jaw unit is made up of a pair of substantially duplicate companion jaws 9 and 10, respectively. The jaws are of appropriate sheet metal or equivalent material and each jaw includes a flat plate-like portion 11, said parts 11 having flanges 12 and 13, respectively, and the flanges 13 being offset as at 14 to permit the flanges 12 to fold or nest together in proper telescoping relationship. The outer free swingable

ends of the jaws are provided with transverse serrated flanges, the serrations forming biting teeth 15 and 16. It is to be observed that the teeth are in alinement with each other, that is, not staggered. Thus, they come together in matching point-to-point relationship as brought out to advantage in Figures 2 and 7. Thus constructed, the teeth become well embedded in the tail portion of the fish (not shown) but do not cut through, as would be the case if the teeth were staggered. A headed hinge pin 17 held in place by a cotter key 18 serves to hingedly connect the jaws together. It is to be observed that the hinge connection is formed adjacent the butt ends of the jaws, said butt ends being denoted by the numerals 19. Inwardly of the ends 19 the plate portions are bulged outwardly in opposed parallelism as at the points 20 to provide clearance pockets for the slidable or projectable and retractable lock unit 21. This part 21 is to be distinguished from a cam or wedge in that it is more in the nature of a non-compressible jaw spacer or chock. Specifically, the part 21 is a yoke formed of rigid bar or strap metal, the bight portion 22 being centrally apertured as at 23 and the limbs or arms 24 being provided with slots 25 through which the hinge pin extends. The slots are of predetermined length so as to limit the inward and outward sliding movements of the part 21 in relation to the hingedly connected jaws.

A headed pin 26 has its head portion 27 swivelly anchored in the countersunk aperture 23, the shank being formed with detents or shoulders 28 functioning to properly assemble the parts. In the arrangement seen in Figure 1, the eye 29 of the pin serves to accommodate a link 30 which is in turn connected with an eye 31 on an anchoring hook or equivalent member 32. The part 32 is expressly designed to engage over the edge of a table to securely anchor the clamp in place. The link 30 provides the desired flexibility and freedom of motion necessary in rotating or "flopping" the clamping means about on the table top, and the pin 26 provides the desired swivel action. Hence, all of the parts coordinate their conjoint functions in properly fastening the clamp on the table while allowing it to shift and swing laterally or sideways or to be bodily turned in an axial direction. This makes for secure anchorage of the fish and at the same time expedites the handling and turning operations for scaling and butchering purposes.

As before stated, the arrangement illustrated in Figures 6 and 7 is expressly adapted for use in a fish market. Here the bench or table is denoted by the numeral 33, this having a staple 34 forming a suitable anchor for the swivelled pin 26. The only other difference in the modification shown is the spring means. That is to say, in Figures 3 and 4 a coiled spring 35 surrounds the hinge pin and the free ends or limbs 36 and 37 bear outwardly against the inner faces of the plate portions 11 of the jaws. In Figures 7 and 8, instead of employing a coiled spring I utilize a U-shaped or substantially V-shaped spring. Here the flat limbs 38 and 39 engage the inner faces of the plate portions while the connective portion or bight 40 is connected to the bight portion of the yoke, the connection in this instance being made by the head of the same pin 26.

In both forms of the invention the spring means serves to normally spread the jaws apart. The spacing of the jaws is such as to facilitate placement of the tail of the fish therebetween. Then the jaws are pressed together with the hands, forcing the teeth 15 and 16 into the flesh of the fish. When the points of the teeth 15 and 16 come together from this hand pressure, the aforementioned butt ends 19 swing into spaced parallelism. This makes way for the outward sliding of the chock forming yoke means 21. It is to be observed that there is no cam or wedge action. In other words, the yoke functions like a rigid spacer or chock, being simply interposed and frictionally lodged between the ends 19 and preventing said ends from swinging toward each other or allowing the jaws to open. It will be seen therefore, that the action of the device is simple. First close the jaws and press the teeth together against the tension of the spring and then, while holding the jaw unit, exert an endwise pull on the fish and the clamp as a unit, and thus slide the lock or yoke 21 between the ends 19. Then the fish is securely clamped in position for whatever activity is desired.

As before stated, the link 30 and hook 32 provide the desired flexibility of action of the clamping means when the device is secured on a table or the like. In Figures 6 and 7 the simple staple 34 provides an ideal anchor for the swivelled retention or pin means 26. In the arrangement in Figures 6 and 7 it is evident that when the scaling and butchering operation is completed, the jaws can be readily opened by simply exerting an endwise thrust of the fish and clamp as a unit in the direction of the anchoring staple 34. This shoves the yoke in and releases the jaws.

It is thought that the description taken in connection with the drawings will enable a clear understanding of the invention to be had. Therefore, a more lengthy description is thought unnecessary.

While the preferred embodiment of the invention has been shown and described, it is to be understood that minor changes coming within the field of invention claimed may be resorted to if desired.

I claim:

1. A freely shiftable and axially turnable fish scaling and butchering clamp expressly proportioned and designed to effectively grip the tail portion of said fish without cutting through said tail portion comprising a pair of duplicate jaw units equal in length, said units being hingedly connected intermediate their ends by a cross-pin and arranged in superposed parallelism and the rear transverse ends being flat across and spaced apart to provide an unobstructed space, the opposite ends of said jaw units having matchable and aligned teeth whose points are adapted to meet and abut each other, and a slidable yoke interposed between said rear ends, the yoke being of a width commensurate with the width of the jaw units, the bight portion of the yoke coacting with the straight-across ends of the jaw units, and the arm portions being slidable between the longitudinal edge portions of the jaw units and slotted and slidably connected with the hinge pin.

2. A freely shiftable and axially turnable fish scaling and butchering clamp expressly proportioned and designed to effectively grip the tail portion of a fish without cutting through said tail portion comprising a pair of duplicate jaw units equal in length, said units being hingedly connected intermediate their ends by a cross-pin and arranged in superposed parallelism and the rear transverse ends being flat across and spaced apart to provide an unobstructed space, the opposite

ends of said jaw units having matchable and aligned teeth whose tip portions are adapted to meet and abut each other, a slidable yoke interposed between said rear ends, the yoke being of a width commensurate with the width of the jaw units, the bight portion coacting with the flat across, rear transverse ends of the jaw units, the arm portions being slidable between the longitudinal edge portions of the jaw units and slotted and slidably connected with the hinge pin, together with an anchoring pin swivelly connected to the bight portion of the yoke, and spring means interposed between the jaw units to spread and hold the same normally spaced apart.

3. A freely shiftable and axially turnable fish scaling and butchering clamp expressly proportioned and designed to effectively grip the tail portion of a fish without cutting through said tail portion comprising a pair of duplicate jaw units equal in length, said units being hingedly connected intermediate their ends by a cross-pin and arranged in superposed parallelism and the rear transverse ends being flat across and spaced apart to provide an unobstructed space, the opposite ends of said jaw units having matchable and aligned teeth whose tip portions are adapted to meet and abut each other, a slidable yoke interposed between said rear ends, the yoke being of a width commensurate with the width of the jaw units, the bight portion coacting with the flat across, rear transverse ends of the jaw units, the arm portions being slidable between the longitudinal edge portions of the jaw units and slotted and slidably connected with the hinge pin, together with an anchoring pin swivelly connected to the bight portion of the yoke, and spring means interposed between the jaw units to spread and hold the same normally spaced apart, said spring means being a U-shaped spring connected with said yoke and operable in conjunction therewith.

4. A fish scaling clamp comprising pivoted jaws, the forward ends of said jaws having teeth projecting inwardly and in alignment with one another, the pivot of the jaws being intermediate the ends thereof, a U-shaped chock having slots in the legs thereof, the pivot extending through the slots, said chock having upper and lower straight parallel edges, said jaws having inwardly facing opposed curved recesses, whereby, when the jaws are in position for pivotal movement, the parallel edges of the chock are positioned within the recesses and when the jaws are in clamping position, the parallel edges of the chock are in engagement with the rear outer edge portions of the jaw members outside the recesses, and means for moving said chock to and from operative position.

5. A fish scaling clamp comprising pivoted jaw members, the forward end of each jaw having teeth, the pivot of the jaws being intermediate the ends thereof, a chock formed of a flat piece of metal U-shaped in edge view and having a slot in each leg, the pivot extending through said slots, and the base of the U-shaped part resting between said jaw members at the end portions of said jaw members opposite their toothed ends, and means for moving said chock to operative position to hold the jaws closed.

ALBERT S. HAISLIP.