Oct. 18, 1938. J. E. BENSON 2,133,529

OYSTER OPENER

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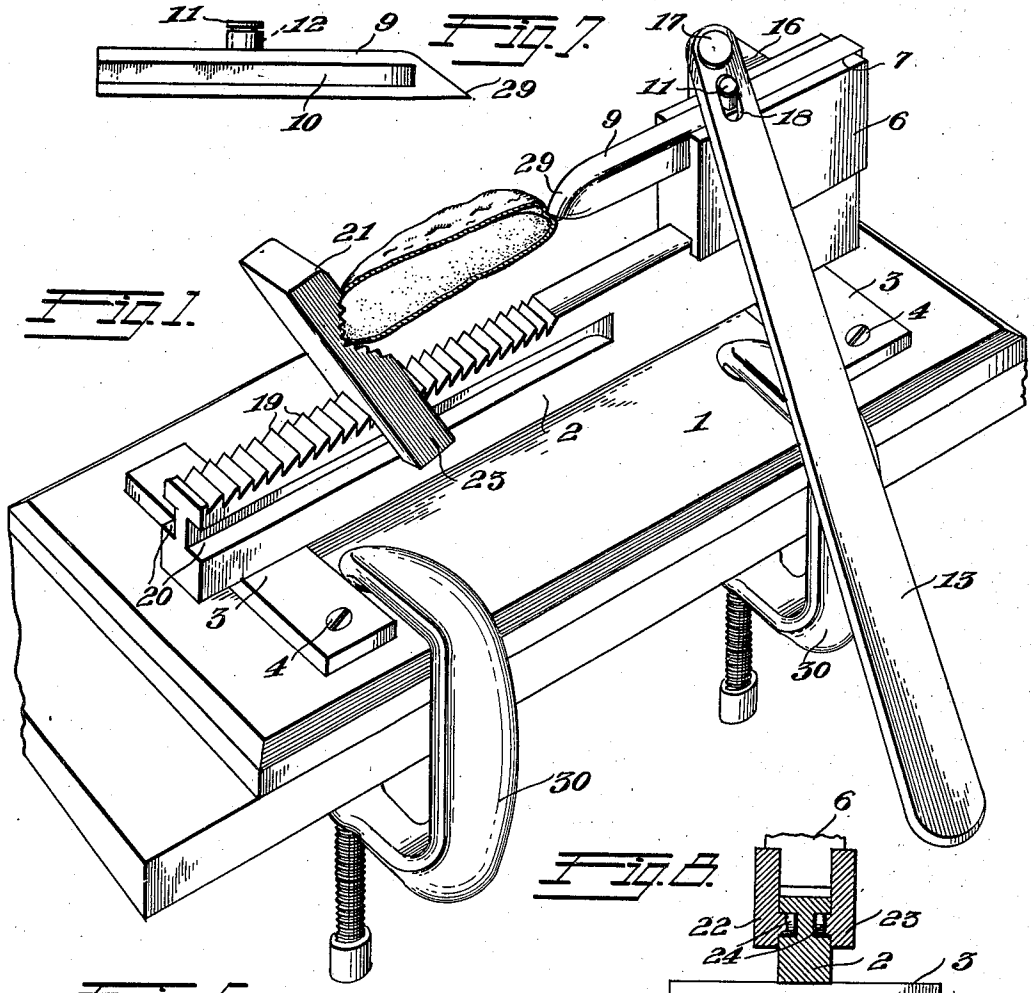


Fig. 7.

Fig. 1.

Fig. 8.

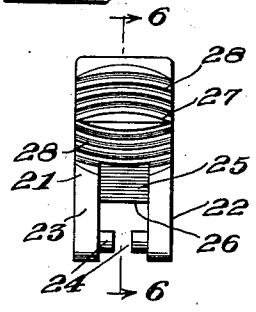


Fig. 5.

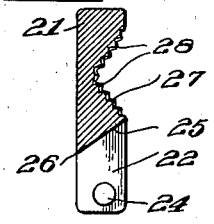


Fig. 6.

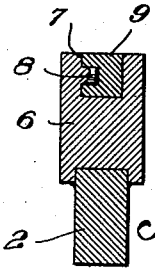


Fig. 9.

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Fig. 2.

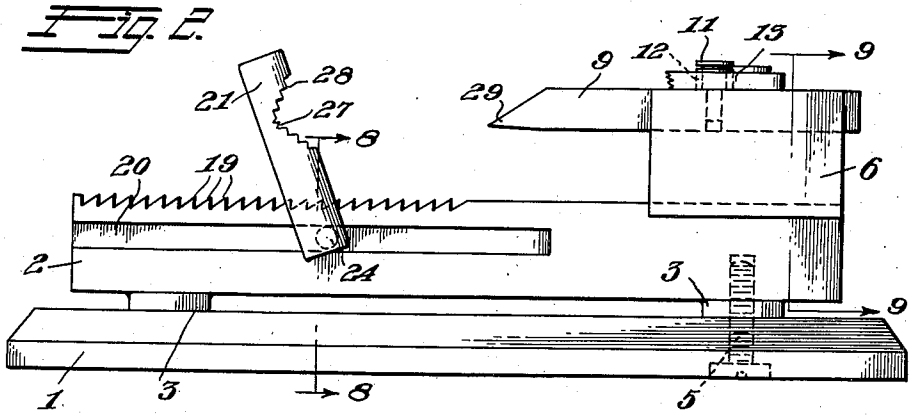
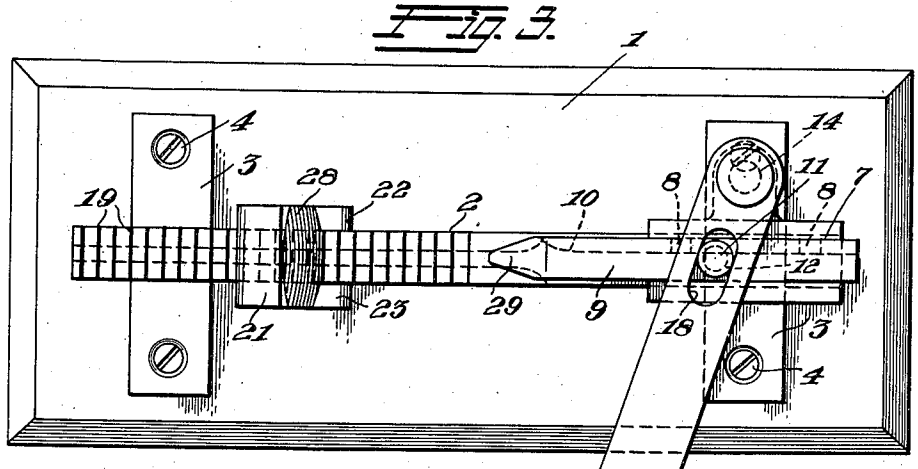


Fig. 3.



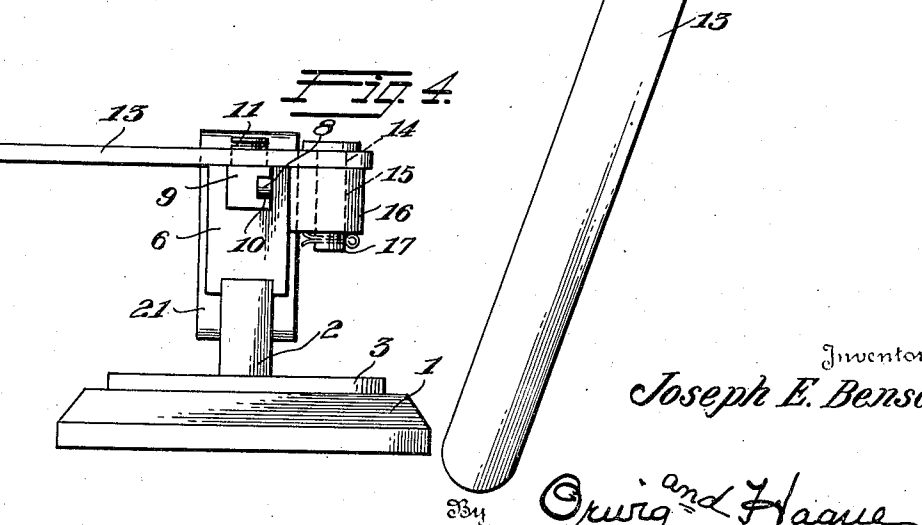


Fig. 4.

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UNITED STATES PATENT OFFICE

2,133,529

OYSTER OPENER

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Application March 15, 1937, Serial No. 131,080

5 Claims. (Cl. 17—9)

This invention is directed to an improvement in oyster openers, wherein oysters, regardless of size or shape, may be conveniently placed and the shell rapidly and positively opened to permit removal of the oyster.

The primary object of the invention is the provision of an implement of this type wherein the opening knife is guided for straight line movement under appropriate lever action, to insure certainty of movement in the shell-opening operation under just sufficient leverage to compel shell opening without reaching the oyster proper.

A further object of the invention is the provision of means whereby the implement may be readily and conveniently set for cooperation with oysters of different size, and whereby the oyster is positively held against yielding under the opening action of the knife.

The invention is described with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of the oyster-opening implement.

Figure 2 is a side elevation of the same.

Figure 3 is a plan view of the same.

Figure 4 is an end view of the same.

Figure 5 is an end elevation of the holding jaw.

Figure 6 is a vertical section of the same on the line 6—6 of Figure 5.

Figure 7 is a side elevation of the knife.

Figure 8 is a section on line 8—8 of Figure 2.

Figure 9 is a section on line 9—9 of Figure 2.

The improved implement in the preferred form illustrated in the drawings, includes a base 1, on the surface of which is secured an elongated bar-like member 2. The member 2 is preferably welded to cross-strips 3, at right angles to and projecting in both directions beyond the member, which strips are removably secured to the base at 4. A threaded bolt 5 may be passed upwardly through the base and take into the member 2 adjacent the respective ends of the latter, if additional holding is desired.

A knife guide block 6 is secured to and rises above the member 2 at one end of the latter. The block may be integral with the member 2 or independently formed and secured to the member in any appropriate manner. The block is formed in the upper surface with a channel 7 to receive and guide the knife, one wall of the channel having inwardly-extending pins 8. The block is provided with a laterally-offset bracket, the upper surface of which is flush with the upper surface of the block.

A knife or opening member 9, preferably of rectangular form in section and of a size to slidably fit the channel 7, is mounted for movement in said channel. One wall of the knife is formed with a longitudinally ranging channel 10 to receive the pins 8 when the knife is in place, thus assisting in guiding the knife and preventing any upward movement thereof. The knife is provided with a pressure pin 11 extending upwardly from the upper surface of the knife, such pin preferably having a free encircling sleeve 12. An operating lever 13 is formed with a pivot opening 14 at one end to cooperate with an opening 15 in the bracket, here indicated at 16, a pivot pin 17 being passed through the openings 14 and 15. The lever at an appropriate point is formed with an elongated slot 18, to cooperate with the pressure pin 11, the rotatable sleeve on the latter providing an anti-friction bearing.

The upper surface of the end of the member 2 remote from the block 6 is formed with successive teeth or serrations 19, presenting square surfaces toward the block and inclined surfaces from the block. The side walls of the member 2 for a length exceeding that of the toothed portion is formed with longitudinal-ranging channels 20, which open through the end of the member 2 remote from the block 6.

A holding jaw 21 is designed for cooperation with the member 2, and comprises a rectangular shaped body, cut away at the lower end to provide guide-sections 22 and 23, which slidably embrace the toothed portion of the member 2. The guide sections 22 and 23 are formed near their lower ends with inwardly-extending pins 24 which slidably fit in the member channels 20. The lower end of the jaw body between and at the upper ends of the guide sections 22 and 23 is upwardly inclined, as at 25, Figure 6, providing a sharp edge 26 to cooperate with the teeth 19. The inclination 25 permits the jaw to be inclined rearwardly and upwardly relative to the block 6, when the jaw is in position. The face of the jaw body toward the block 6 is formed with a re-entrant face 27, preferably V-shaped in vertical section, with the surfaces thereof roughened or serrated, as at 28.

The pins 24 engaged within the channels 20 not only provide a sliding connection between the member 2 and jaw 21 but also function as pivots whereby the jaw may be swung from the inclined position illustrated in Figures 1 and 2 toward a vertical position to disengage the edge 26 from any one of the teeth preparatory to adjustment of the jaw toward or away from the block 6 by sliding the pins longitudinally of the channels, the pins permitting the jaw to again assume the in-

clined position in any desired adjusted position thereof whereby the edge **26** engages the square surface of an adjacent tooth to lock the jaw against movement away from the block **6**.

The end of the opening member toward the jaw is formed in an appropriate manner for facilitating the entrance of the knife between the shells of the oyster and forcing such shells apart. As illustrated, the knife is shown as provided with a chisel point or end having a relatively sharp penetrating end and sharply inclined surfaces beyond the point. The opening point, indicated at **29**, is preferably constructed as described, but is not limited in this particular.

In use, the jaw is adjusted longitudinally of the member **2** and relative to the block **6**, to accommodate the particular size of oyster being handled. The jaw in its adjusted position is fixed against opposite movement through engagement with the teeth **19**. The oyster is placed between the jaw and block, one end of the shell being placed in the recessed face **27** of the jaw and the other end being held in line with the knife. The lever is operated to force the end of the knife between the shell-halves of the oyster, the form of the knife penetrating end readily opening and spreading the shells without disturbing the oyster proper. The oyster is held in the hand of the operator during the opening, in order that the oyster may be held substantially horizontal and loss of juice avoided during the opening operation.

The jaw may be readily adjusted to accommodate oysters of different sizes, and with irregular shaped oyster shells the ability to present the shell juncture to the knife by hand avoids loss of time and permits the ready and convenient shelling of all oysters regardless of size or formation.

The base **1** is designed to be removably secured to a table or the like by adjustable clamps **30**.

What is claimed to be new is:

1. An oyster opener including a bar-like member formed in its upper surface at one end with teeth, the sides of the member having longitudinally ranging channels opening through the end of the member, a block carried by the member at the end opposite the teeth, a knife slidable in the block, a lever for operating the knife, and a jaw having sliding cooperation with the channels in the member and formed to engage any selected tooth to thereby determine the spacing of the jaw from the block, that face of the jaw next the block being formed with an oyster-receiving recess.

2. An oyster opener including a bar-like member formed in the sides at one end with guiding channels and on the upper surface substantially coextensive with said channels with teeth, a jaw having guiding portions to embrace the sides of the member, with such portions terminally provided with pins to engage in said channels, the jaw being formed to present a sharpened edge for cooperation with the teeth, whereby the jaw may be adjusted longitudinally of the member, a block at the opposite end of the member, a knife slidable in the block, and a lever for operating the knife.

3. A construction as defined in claim 2, wherein the lever is pivotally supported on a bracket carried by the block and wherein the lever is formed with an elongated slot to engage a pin carried by the knife, the pin having a freely rotating sleeve to form an anti-friction bearing for the lever.

4. A construction as defined in claim 2, wherein the block is provided with pins to slidably engage a longitudinally ranging channel in one side of the knife, to thereby prevent upward movement of the knife during operation.

5. An oyster opener including a bar-like member, a block projecting upwardly from one end of the member, a knife slidably supported by the block, a plurality of teeth on the upper face of the member adjacent the opposite end thereof, the teeth presenting square surfaces toward the block and inclined surfaces away from the block, an oyster engaging jaw slidably and pivotally connected with the member and having an edge for engagement with the square surface of any one of the teeth to prevent movement of the jaw away from the block, and means for actuating the knife.

JOSEPH E. BENSON.