No. 896,162. PATENTED AUG. 18, 1908.

A. H. ROTERS.

OYSTER OPENER.

APPLICATION FILED NOV. 21, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

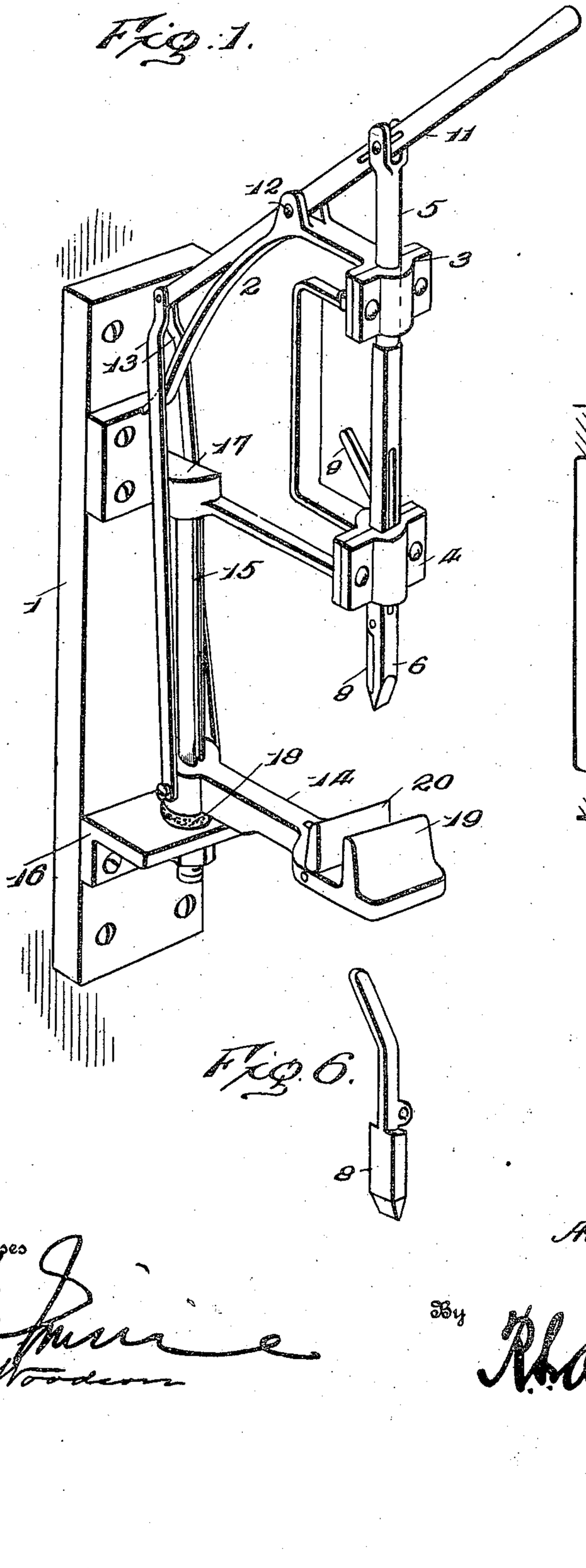

Fig. 5.

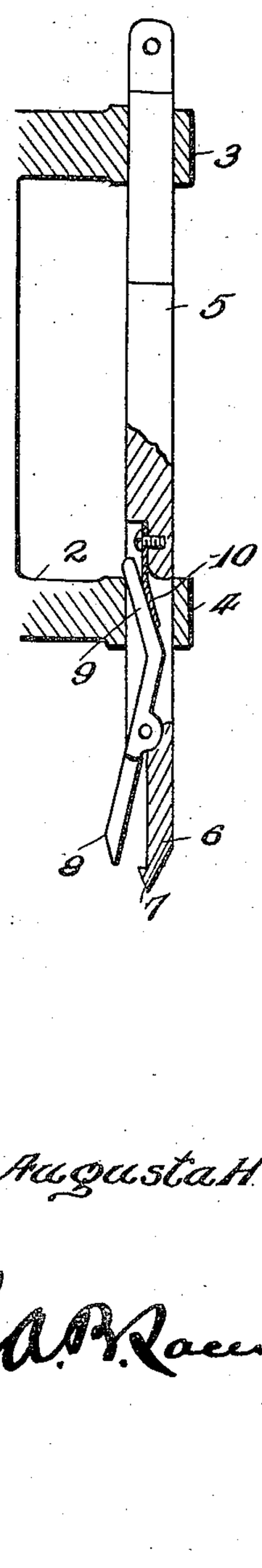

Fig. 6.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

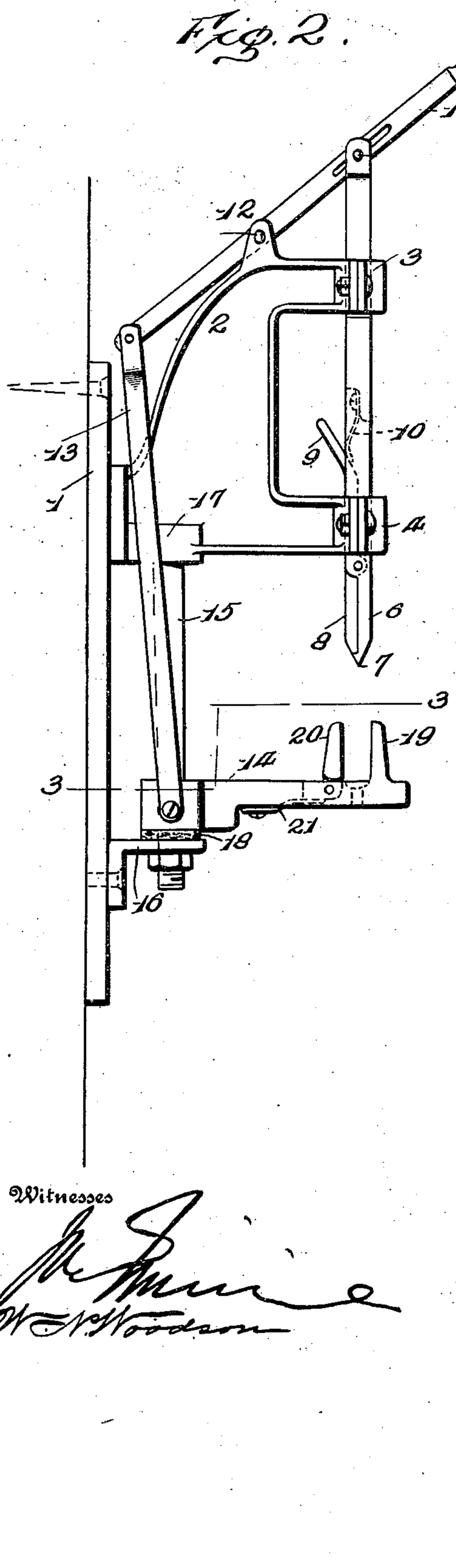


Fig. 3.

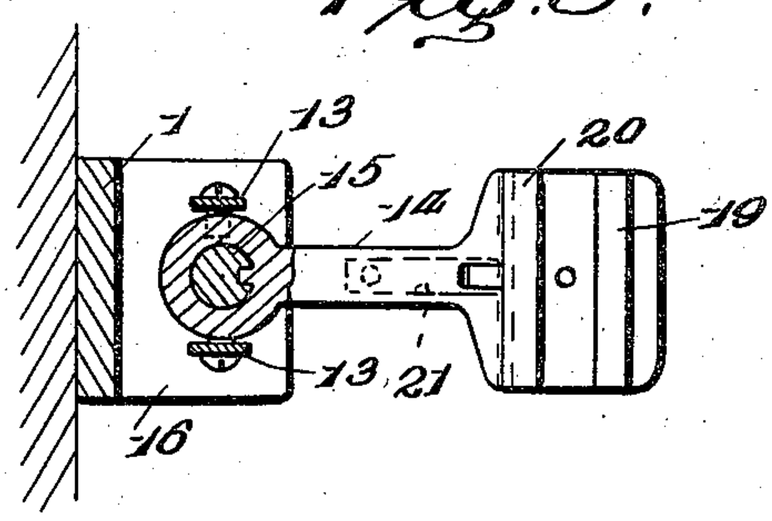
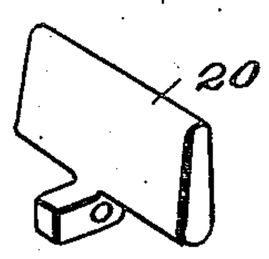


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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OYSTER-OPENER.

No. 896,162. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed November 21, 1907. Serial No. 403,233.

To all whom it may concern:

Be it known that I, AUGUSTA H. ROTERS, citizen of the United States, residing at Urania, in the parish of Catahoula and State of Louisiana, have invented certain new and useful Improvements in Oyster-Openers, of which the following is a specification.

This invention comprehends certain new and useful improvements in apparatus for use in shucking oysters, and the object of the invention is a simple, durable and efficient construction of apparatus for opening oysters, the device being arranged so that the manipulation of a single lever will effect the operation of breaking open the shell.

The invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of my improved oyster opening apparatus; Fig. 2 is a side elevation thereof; Fig. 3 is a horizontal sectional view on the line 3—3 of Fig. 2; Fig. 4 is a detail perspective view of the movable rib of the oyster holding carriage; Fig. 5 is a detail sectional view of the jaws designed to wedge in between the section of the oyster shell and break the same open; and, Fig. 6 is a detail perspective view of the movable jaw.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates the base or standard of my improved oyster opening apparatus which may be of any desired construction or design and which is adapted to be secured to a counter or a wall, or any other suitable support.

2 designates the head of the apparatus which is preferably in the form of a casting held by screws or other fastening devices to the base 1 near the upper end thereof. The head 2 is formed with upper and lower bearings 3 and 4 in which a rod 5 is mounted to vertically reciprocate. Preferably the rod 5 is square in cross section for two-thirds of its length and its upper end is round. The rod 5 is formed at its lower end with a relatively stationary jaw 6 which is provided with a wedge shaped extremity 7. The rod 5 is also formed with a recess in which the relatively movable jaw 8 is pivotally mounted, the movable jaw being designed to close into the recess in the rod, as clearly illustrated in the drawings. The movable jaw 8 is formed with an angularly disposed arm 9 at its upper end which is pressed upon by a spring 10 in the recess in the rod 5, the said spring having the manifest tendency of closing the jaws together.

The upper end of the rod 5 is forked as shown and has a pin and slot connection with a hand lever 11 fulcrumed intermediate of its ends as indicated at 12 on the upper end of the head 2, to turn about a horizontal axis. One end of the hand lever 11 is pivotally connected to link rods 13 and said link rods are in turn connected at their lower ends to opposite sides of a carriage 14. The carriage 14 is mounted to slide up and down on a guide stem 15 and has a feathered connection therewith so as to prevent the carriage from turning on the stem as it slides thereon. The stem 15 is held at its lower end to the bracket 16 secured to the base 1 near the lower end thereof, and the upper end of the stem is mounted in a boss 17 formed on the lower end of the head 2. Preferably a rubber ring or gasket 18 encircles the lower end of the stem 15 so as to act as a buffer and reduce the shock and noise of the carriage 14 when the latter drops to its lowermost position. The carriage 14 is formed with an upwardly projecting relatively stationary rib 19 and a pivot rib 20 coacting therewith and held normally in a vertical position by means of a spring 21. Under pressure, the rib 20 will swing backwardly away from the stationary rib 19. As illustrated in the drawing, the spaced ribs 19 and 20 are in vertical alinement with the jaws 6 and 8.

In the practical use of my improved oyster opening apparatus, an oyster is stood on end in the carriage 14 between the ribs 19 and 20, and the operator then depresses the outer end of the hand lever 11. This results in forcing the rod 5 downwardly, the angularly disposed arm 9 of the movable jaw 8 being forced into the recess as it passes in the bearing 4 and the

said jaw being moved away from the stationary jaw 6. It is to be understood that at the same time, owing to the linked connection between the hand lever and the carriage, the latter will be forced upwardly towards the jaws, and the wedge member will enter in between the two halves of the oyster shell just preparatory to the opening movement of the jaws. The consequent outward movement of the jaw 8 will manifestly force the two sections of the shell apart and this operation will be permitted by the yielding rib 20 of the carriage 14, the shell being pressed outwardly and downwardly in an evident manner.

From the foregoing description in connection with the accompanying drawings, it will be seen that I have provided a very simple, durable and efficient construction of oyster opening apparatus, that can be worked with a single hand lever to effectively wedge the two sections of the oyster shell apart. After one oyster has been opened, the operator merely releases the hand lever and the weight of the carriage 14 will restore the parts to their normal positions, with the jaws 6 and 8 closed, ready to operate on another oyster.

Having thus described the invention, what is claimed as new is:

1. In an apparatus of the character described, the combination of a supporting base, a head secured to said base and provided with upper and lower bearings, a rod mounted to move up and down in said bearings and provided at its lower end with a stationary jaw, a movable jaw pivotally connected to the rod and formed with an angularly disposed arm at its upper end, said arm being movable through the lower bearing whereby it will be engaged thereby in the movement of the rod in one direction to open the jaws, a spring secured to the rod and adapted to press outwardly upon said arm, a lever pivotally connected to the upper end of said rod and fulcrumed intermediate of its ends on the head, a vertically disposed guide stem, supports for said stem, and a carriage mounted to move up and down on said stem and having a linked connection with said lever, said carriage being provided with a relatively stationary and a hinged rib, said ribs being spaced from each other and located in vertical alinement with the said jaws.

2. An oyster opening apparatus, comprising a reciprocating rod, a support therefor, means for moving said rod, jaws carried by said rod, means for automatically opening the jaws upon the movement of said rod in one direction, an oyster supporting carriage in alinement with said jaws, and means for supporting said carriage.

3. An apparatus of the character described, comprising two jaws having a hinged connection with each other, one of said jaws being provided with a wedge end, a support for said jaws, means for moving said jaws bodily in one direction, means for automatically opening the jaws during such movement, an oyster supporting carriage in alinement with said jaws, and means for supporting said carriage.

4. An apparatus of the character described, comprising hinged jaws, a support for said jaws, means for moving said jaws in one direction, means for automatically opening the said jaws during such movement, an oyster supporting carriage in alinement with said jaws, and means for moving said carriage towards the jaws.

5. An apparatus of the character described, comprising jaws, a support for said jaws, an oyster holding carriage in alinement with said jaws, means for moving the jaws and carriage towards each other, and means for automatically opening the jaws during such movement.

6. An apparatus of the character described, comprising a longitudinally movable rod, jaws carried by said rod, a lever, a support for the rod, said lever being fulcrumed on said support, a carriage in alinement with said jaws, a support upon which said carriage is mounted to move, a connection between said carriage and said lever designed to move the carriage towards the jaws, and means for automatically opening the jaws during such movement.

7. An apparatus of the character described, comprising a longitudinally movable rod, jaws carried by said rod, means for moving said rod in one direction, means for opening the jaws automatically during such movement, an oyster holding carriage, and a support therefor, said carriage being provided with a relatively stationary and a yielding rib, said ribs being spaced from each other, as and for the purpose set forth.

8. An apparatus of the character described, comprising a head provided with upper and lower bearings, a vertically disposed rod mounted to move longitudinally in said bearings, a relatively stationary jaw secured to said rod, the rod being provided with a recess, a hinged jaw mounted on the rod and coacting with the stationary jaw and formed with an angularly disposed end adapted to enter said recess, a spring pressing outwardly upon the upper end of the movable jaw, said spring yielding and permitting the upper end of the movable jaw to be forced into the recess by the lower rod bearing upon the movement of the rod in one direction, an oyster holding carriage in alinement with the jaws, and a support for said carriage.

9. An apparatus of the character described, comprising a base, a head secured to said base, a bracket secured to the base below the head, a guide stem supported on said bracket and head, a carriage mounted to move longitudinally on said stem, a rod hav-

ing a sliding movement in the head, relatively stationary and movable jaws carried by said rod in alinement with said carriage, a lever fulcrumed intermediate of its ends on the head, one arm of the lever being connected to the said rod, and link rods connecting the other arm of the lever with the carriage.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUSTA H. ROTERS. [L. S.]

Witnesses:
G. M. TANNEHILL,
D. J. WHITTEN.