June 21, 1949. J. PLOCK 2,473,608

OYSTER OPENING METHOD

Filed Sept. 24, 1945

Fig. 3

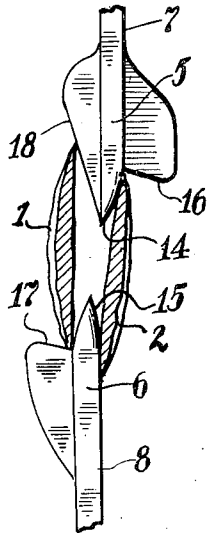


Fig. 2

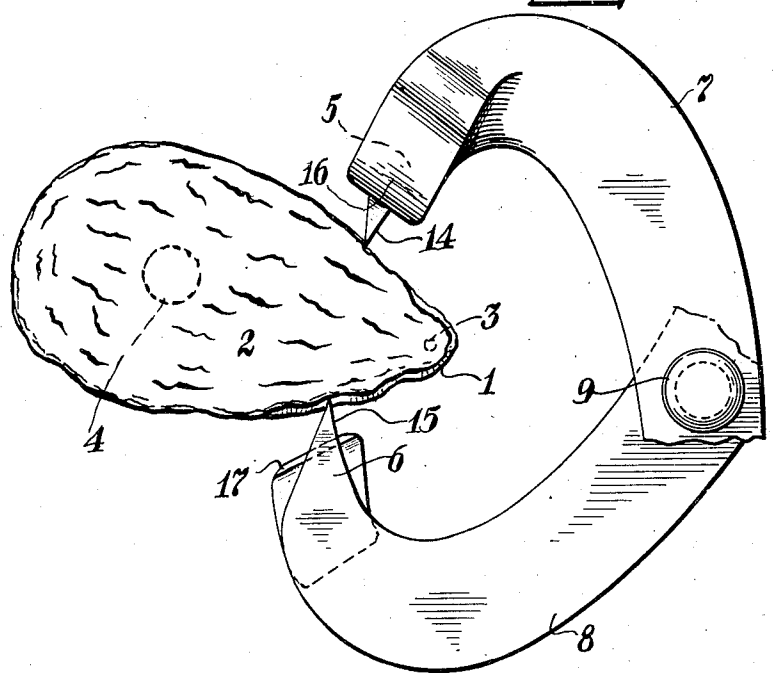
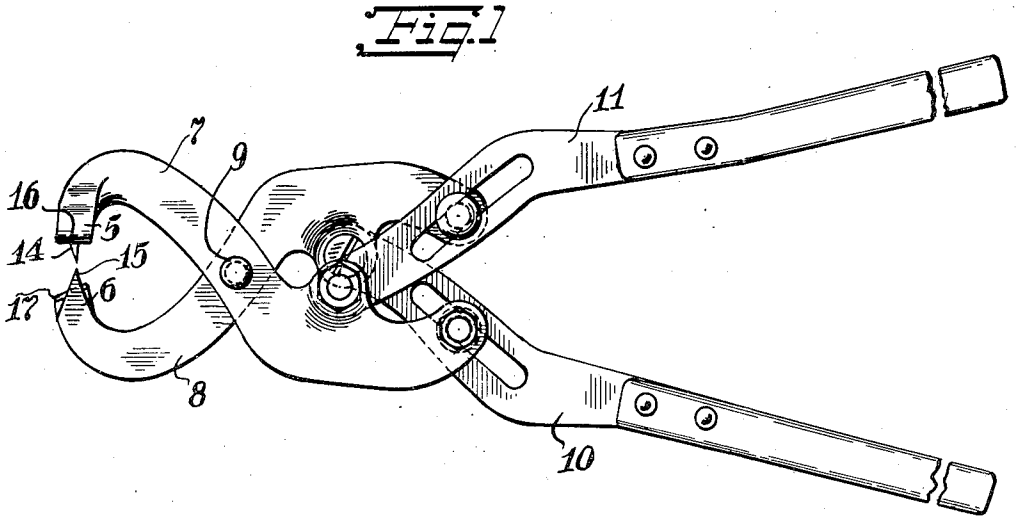


Fig. 1



INVENTOR.
John Plock
BY
ATTORNEY

Patented June 21, 1949 2,473,608

UNITED STATES PATENT OFFICE

2,473,608

OYSTER OPENING METHOD

John Plock, Southold, N. Y.

Application September 24, 1945, Serial No. 618,122

11 Claims. (Cl. 17—45)

1

My invention relates to a method for opening bivalves such as oysters. It has been customary to open such a shell by inserting a knife blade between the two valves in order to cut the adductor muscle. This is a slow process and very difficult and frequently results in injury to the operator. My object is to simplify the process and make it easier, cleaner and safer.

Accordingly instead of attempting to separate the valves by first cutting the adductor I break the hinge joint and separate the two valves by turning one valve with respect to the other in the general plane of the meeting edges. This can be done in various ways but preferably by mechanism having jaws with sharp spikes or points for penetrating the joint between the valves and breaking the hinge. These jaws have shoulders alongside of the spikes for engaging the opposite edges of the valves and turning or sliding one valve across the face of the other valve so as to twist the adductor muscle of the oyster and tear it away from the left or deep valve. The adductor muscle is then cut away from the right or shallow valve in the usual manner.

Fig. 1 is a face view of one form of device for carrying out my invention.

Fig. 2 is a full size view showing a pair of jaws of an instrument involving my invention applied to the edges of an oyster shell in position for separating the valves.

Fig. 3 is an end view showing the jaws in position separating the valves.

The drawing shows a typical oyster having the so-called deep or left valve 1 and the shallow or right valve 2. These valves are hinged together at 3 and connected by an adductor muscle 4.

A simple form of device for opening an oyster consists of two special jaws, one of which is movable with respect to the other. In the form shown the jaws 5 and 6 are carried by two arms 7 and 8 respectively hinged at 9 and operated by double fulcrum levers having handles 10 and 11 with crossed hinged and sliding connections so that by moving one handle toward the other, one jaw will swing toward the other on an arc.

Jaw 5 has a sharpened spike 14 and the other jaw 6 has a spike 15. These spikes are offset laterally as shown in Fig. 3 and adapted to be placed at the juncture of the shell between the valves near the hinge joint 3. On the opposite sides of

2

the jaws 5 and 6 are abutting shoulders 16 and 17 respectively with faces preferably inclined so as to approximate the inclined opposed edges of an oyster. I also prefer to provide an inclined or tapered wedge-like cam 18 which extends outwardly from the spike 14.

When an oyster is held for instance in one hand and one jaw of the device is moved with respect to the other in a direction transversely of the length of the oyster, the spikes enter along the juncture and between the valves and the offset shoulders 16 and 17 engage the edges of the valves splitting the juncture and sliding one valve across the face of the other so as to break it loose by breaking the hinge and tearing the left valve from the adductor muscle. The cam 18 assists in this action. The oyster body is then separated from the right valve by severing the adductor muscle in any well known manner.

With the elongated handles providing the leverage and the offset shoulders directing their thrusts on the valves in opposite directions transversely of the longitudinal axis of the oyster, the valves are readily separated apart.

The apparatus may be mounted so that one jaw is moved vertically by hand or by a foot press or both jaws may be mounted so that one is moved horizontally with respect to the other.

The apparatus may also be advantageously used to separate oysters which may be secured together in a cluster as they frequently are. In such cases, the sharp points of the jaws are applied at points of juncture of the respective shells and then one jaw is moved toward the other or both jaws may be moved simultaneously toward each other so that the tapered points of the jaws enter between the edges and force the shells apart.

I claim:

1. The method of opening an oyster which consists in breaking the hinge joint between the valves and then turning one valve relative to the other substantially in the plane of the edges of the valves to separate the body of the oyster from one valve and then severing the adductor muscle from the other valve.

2. The method of opening an oyster which consists in forcing sharp points between the edges of the valves near the hinge and breaking the hinge joint between the valves and then engaging the opposite edges and forcing one valve away

from the other valve in the approximate plane of the edges of the valves to separate the body of the oyster from one valve and then severing the adductor muscle from the other valve.

3. The method of opening an oyster which comprises supporting and holding one valve and forcibly moving the other valve across the face of the relatively supported valve with force sufficient to shear the adductor muscle from one of the valves and breaking the hinge of the shell without the aid of a knife.

4. The method of opening an oyster which comprises supporting one valve and relatively moving the other valve across the face of the supported valve with force applied in a direction substantially parallel with the plane of the meeting edges of the valve and transverse to the longitudinal axis of the oyster sufficient to shear the adductor muscle from one of the valves without the aid of a knife and then cutting the adductor muscle from the other valve.

5. The method of opening an oyster which comprises supporting and holding the deep valve and moving the shallow valve across the face of the supported valve in a direction substantially parallel with the plane of the meeting edges of the valve and transverse to the longitudinal axis of the oyster, shearing the adductor muscle from the deep valve and breaking the hinge of the shell without the aid of a knife.

6. The method of opening an oyster which comprises supporting one valve and moving the other valve across the face of the first mentioned valve while holding the first mentioned valve by hand and thus tearing the adductor muscle away from the first mentioned valve.

7. The method of opening an oyster which comprises supporting one valve and moving the other valve across the face of the first mentioned valve while holding the first mentioned valve by hand, breaking the hinge and tearing the adductor muscle away from the first mentioned valve and then cutting the adductor muscle away from the second mentioned valve.

8. The method of opening an oyster which comprises supporting the deep valve and moving the shallow valve across the face of the deep valve while holding the deep valve by hand and tearing the adductor muscle away from the deep valve.

9. The method of opening an oyster which comprises applying force to the outer surface of one valve in a plane approximately parallel with the plane of the meeting edges of the valves and in a direction transverse to the length of the oyster, while the other valve is supported relative to the first mentioned valve and steadied by hand and moving one valve across the face of the other valve until the hinge is broken and the adductor muscle is torn from one valve.

10. The method of opening an oyster which comprises applying force to the outer surface of one valve in a plane approximately parallel with the plane of the meeting edges of the valves and in a direction transverse to the length of the oyster, while the other valve is supported relative to the first mentioned valve and steadied by hand and moving one valve across the face of the other valve and tearing the adductor muscle from one valve, then cutting the adductor muscle from the remaining valve.

11. The method of opening an oyster which comprises applying force to the outer surface of the shallow valve in a plane approximately parallel with the plane of the meeting edges of the valves and in a direction transverse to the length of the oyster, while the deep valve is supported relative to the shallow valve and moving the shallow valve across the face of the deep valve and thereby tearing the adductor muscle from the deep valve, then cutting the adductor muscle from the shallow valve.

JOHN PLOCK.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
133,267	Starin	Nov. 19, 1872
411,381	Huppmann	Sept. 17, 1889
848,608	Torsch et al.	Mar. 26, 1907
848,784	Torsch et al.	Apr. 2, 1907
943,982	Lloyd	Dec. 21, 1909
1,159,262	Ottum	Nov. 2, 1915
1,663,758	Gwisdalla	Mar. 27, 1928
2,354,928	Ragupos	Aug. 1, 1944
2,391,739	Ragupos	Dec. 25, 1945