United States Patent

Adams

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[45] **Aug. 22, 1972**

[54] **OYSTER CULTCH AND ASSEMBLY JIG**

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[52] **U.S. Cl.** **119/4,** 209/123

[51] **Int. Cl.** **A01k 61/00**

[58] **Field of Search** 119/4

[56] **References Cited**

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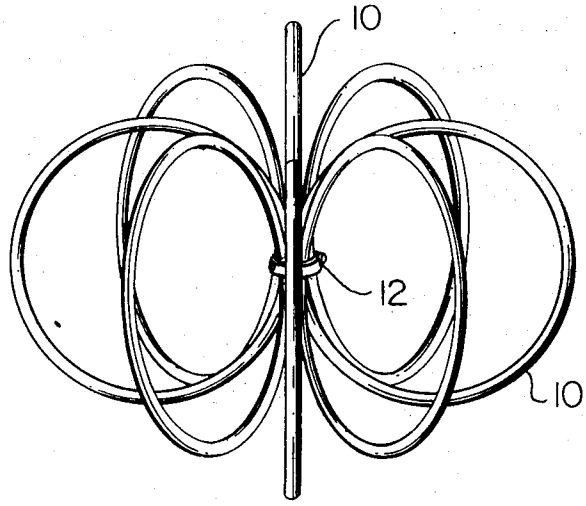
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[57] **ABSTRACT**

A clutch for growing oysters comprising a plurality of rings connected together at a central point. The rings have surfaces suitable for the attachment of oyster spat. An assembly jig is utilized comprising a horizontal planar surface having a plurality of elongated apertures to support the rings in position for applying a fastener.

4 Claims, 6 Drawing Figures



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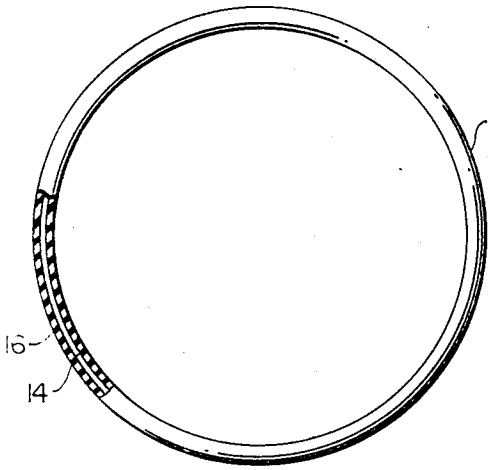


FIG. 2

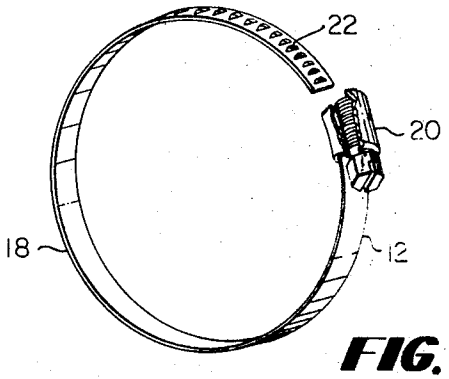


FIG. 3

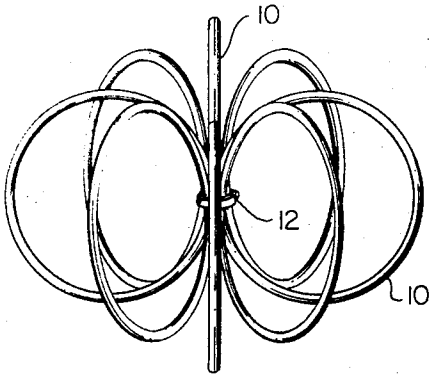


FIG. 1

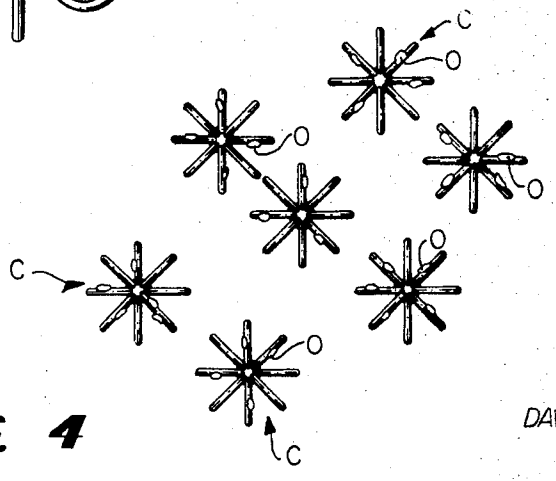


FIG. 4

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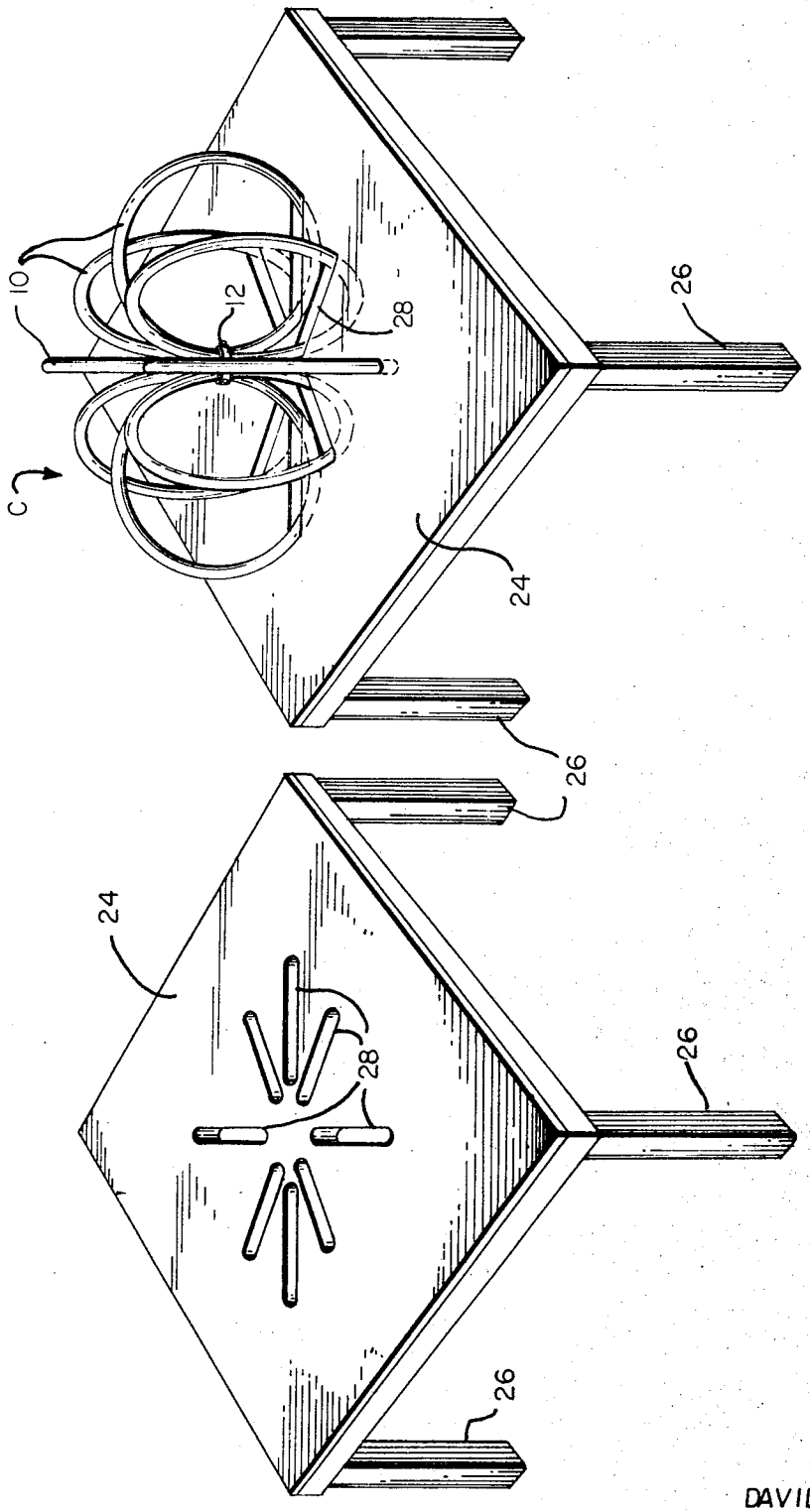


FIG. 6

FIG. 5

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OYSTER CULTCH AND ASSEMBLY JIG

This invention relates to an improved oyster cultch for the growing of oysters and to an assembly jig for use in assembling the cultch.

The demand for oysters in this country has made the development of new oyster beds a necessity. An important aspect of developing oyster beds is the provision cultch to provide points of attachment for the oyster spat. A major factor in the selection of the cultch is the ease with which the oysters can be removed from the cultch. Another factor and possibly as important is that the cultch should provide attachment surfaces above the oyster bed base to protect the spat from suffocation due to sediment deposition and from attack by many of the crawling predators of the water such as drills, starfish, crabs, etc.

Prior attempts of producing a successful cultch have included the use of suspended members that are supported above the oyster bed base by use of means such as a rope or are mounted on poles or stakes that are placed on the oyster bed base. Although these types of cultch have satisfied the factors abovementioned they have been found to be rather costly to use as well as time consuming to set up since they involve the use of rope support means or the individual driving into the oyster bed base of the poles or stakes.

It is therefore an object of the present invention to provide a new and improved oyster cultch tire will provide above the oyster bed base attachment surfaces for oyster spat.

It is another object of the present invention to provide an improved oyster cultch which can be easily assembled and easily placed on the oyster bed base.

Yet another object of the present invention is to provide an improved oyster cultch which is easily lifted from the oyster bed base at the time of the harvesting.

Still another object is to provide an improved oyster cultch that is made of material that is non-corrosive and which can be reused a number of times.

Still another object is to provide an assembly jig for the improved oyster cultch that will permit fast assembly of the cultch.

Still another object is to provide an assembly jig for the improved oyster cultch that is inexpensive and easy to manufacture.

The above outlined objectives as well as other objects and features of the present invention are accomplished by an oyster cultch the which generally comprises a plurality of rings such as tire beads that are connected together at a central point by a suitable clamp. The assembly jig comprises a base member having a plurality of apertures to support the tire beads in position for applying the fastener.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in conjunction with the accompanying drawings in which:

FIG. 1 is a perspective view of the improved oyster cultch of the present invention;

FIG. 2 is a perspective view partly in section of the type of ring preferably used in the improved oyster cultch;

FIG. 3 is a perspective view of the fastener used as the connecting means in the present invention;

FIG. 4 depicts several of the improved oyster cultches in an oyster bed with oysters growing on the rings;

FIG. 5 is a perspective view of the assembly jig used in assembling the improved oyster cultch; and

FIG. 6 is a view similar to FIG. 5 showing the oyster cultch in assembled condition.

Referring now to the drawings in detail, wherein like reference numerals indicate like parts throughout the several figures, there is shown the improved oyster cultch C of the present invention comprising a plurality of rings **10** connected together at a central point by means of a fastener **12**.

The rings **10** are preferably formed of tire beads that are used on motor vehicle tires. These beads generally include a metal strip **14** which is covered by rubber **16**. The beads are separated from the main body of the tire in reprocessing and are readily available from tire reclaimers and are very inexpensive. The tire beads fulfill all the necessary requirements for the rings to be used in the present invention. They are non-corrosive because of the rubber covering **16** and they are strong yet flexible because of the metal strip **14**. Additionally, the rubber surface of the beads is slightly roughened thereby providing a surface suitable for attachment by the oyster spat.

Of course, it will be appreciated by those skilled in the art that other types of rings may be suitably used; however, it has been found that tire beads, especially of the larger 15 or 16 inch size, are particularly well adapted for use as the rings of the present invention. Although it is possible to mix different sizes of tire beads it is preferable that a sufficient number of the largest size used be evenly distributed about the fastener **12** in order to provide a level base for the oyster cultch.

The number of rings **10** used in each oyster cultch C may vary depending on the density of the oysters desired on each cultch. It has been found that a minimum of four rings to a maximum of twelve rings can be readily used.

The rings **10** are assembled by use of fastener **12** which as shown in FIG. 3 may be a clamp commonly used to secure radiator hoses in motor vehicles. The fastener **12** which is preferably made of stainless steel to resist corrosion comprises a strap element **18** having at one end a screw member **20** adapted to engage slots **22** on the other end of the strap element **18**. The slots **22** constitute a rack which is moved by the screw member to tighten or loosen the strap element **18**.

It will be appreciated that other suitable fasteners may be used such as any of the numerous strap fasteners used to tie wires or tubes together; however, the stainless steel hose clamp is preferable from the standpoint of its ready availability, its positive locking action and its low cost.

In assembling the oyster cultch C, the ring members **10** to be used are stacked together and one end of the fastener strap element **18** is passed through the ring openings and then brought together with the other end of the fastener strap element **18**. The rings are then moved to form a uniform distribution of rings about the fastener which is then tightened so that the portion of each ring in contact with the fastener is tightly abutted against the adjacent rings. Each ring will then be retained in position with respect to the adjacent rings.

To simplify the assembling process, the assembly jig shown in FIGS. **5** and **6** may be utilized. The assembly jig comprises a horizontal planar surface **24** mounted on leg supports **26**. The planar surface **24** has thereon a

plurality of elongated apertures **28** disposed symetrically about a center part of planar surface **24** with the elongated axis of each aperture **28** extending substantially radially from the center part. The length of each elongated aperture is smaller than the diameter of the smallest size tire bead to be used in the cultch. Although only eight apertures **28** are shown, it should be appreciated that additional apertures can be used depending on the maximum number of tire beads to be used in the cultch.

As will be obvious, the planar surface **24** may be placed on any suitable support to bring the surface **24** to a convenient working height. In all cases the support must provide sufficient space beneath the elongated apertures **28** to permit entry of the lower portions of each tire bead through the apertures.

In using the jig for assembling the cultch, the number of tire beads to be used in the cultch are placed in the apertures **28** and one end of the fastener strap element **18** is passed through the ring openings and then brought together with the other end of the fastener strap element **18**. The fastener is then tightened so that the portion of each ring in contact with the fastener is tightly abutted against the adjacent rings. Each ring will then be retained in position with respect to the adjacent rings.

In use the assembled oyster cultches C are dropped overboard from a boat to rest on the oyster bed base as shown for purposes of illustration in FIG. **4**. The configuration of the cultch in which the rings radiate from the central fastener insures that each cultch will rest on the bottoms of each ring in the cultch thereby providing a stable support for the oysters **0**. The curvature of the rings insures that the major portion of each ring will be above the bottom surface thus providing a safe place for attachment of the oyster spat.

The oyster cultches may be easily assembled on the boat which permits the placing of the individual rings on the boat rather than the assembled cultch which would take up considerably more room. Also, the rings provide ready made openings to receive a rope or hook for bringing the cultches aboard a boat for removing the oysters.

It will be seen that the objects set forth are efficiently attained and since certain changes may be made in the above construction without departing from the scope of the invention, it is intended that all matters contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A cultch for growing oysters comprising an assembly of a plurality of open ring members and means for connecting said ring members together, said ring members having inner and outer circumferential surfaces suitable for the attachment of oyster spat, said ring members being positioned about a central axis of said cultch assembly, each of said ring members extending outwardly from said axis in a different radial direction, said connecting means joining the ring members about a common location on the central axis.

2. The cultch of claim **1** wherein the ring members are uniformly spaced about the central axis and each ring member has an outer portion abutting corresponding portions of the adjacent ring members on each side thereof.

3. The cultch of claim **1** wherein the ring members are bead portions of motor vehicle tires.

4. The cultch of claim **1** wherein said connecting means includes a strap member and a strap member engaging means, said strap member passing through each opening of each ring member and being adjustably secured in said strap member engaging means.

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