(No Model.)

O. B. BEACH.

OBTAINING OYSTER SPAT.

No. 385,161. Patented June 26, 1888.

Fig. 1.

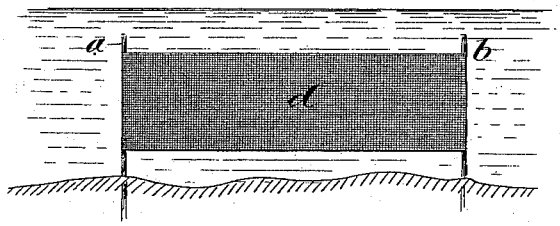


Fig. 2.

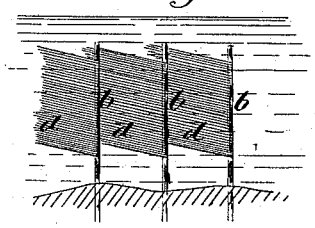
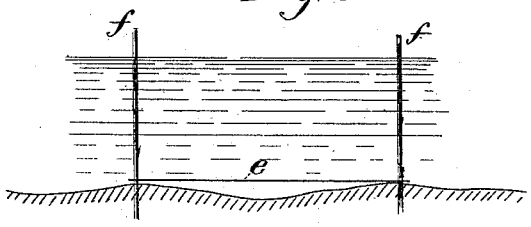


Fig. 3.



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UNITED STATES PATENT OFFICE.

OLIVER B. BEACH, OF STONY CREEK, CONNECTICUT.

OBTAINING OYSTER-SPAT.

SPECIFICATION forming part of Letters Patent No. 385,161, dated June 26, 1888.

Application filed October 24, 1887. Serial No. 253,171. (No model.)

To all whom it may concern:

Be it known that I, OLIVER B. BEACH, of Stony Creek, in the county of New Haven and State of Connecticut, have invented a new Improvement in Obtaining Oyster-Spat; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a section through the water, showing the submerged surface in a vertical position; Fig. 2, a series of such vertical surfaces. Fig. 3 represents the submerged surface in a position lying upon the ground.

This invention relates to an improvement in obtaining the spat of oysters and retaining it in the desired position for setting.

In the more general practice for accomplishing this object oyster-shells are planted—that is, the shells are thrown into the water and distributed over the surface of the bottom to catch the spat, and upon which they will set. In setting, the young oysters are so firmly attached to the shells that they are required to be broken from the shells, because if left to grow in that condition they are so numerous that in their growth they so interfere with each other as to cause the shells to grow in undesirable shapes. To avoid this crowding of the oysters, they are taken up at the proper time, the sets separated, and returned to grow; but in separating or breaking the sets from the shells very many are lost, and the operation is an expensive one, because they are necessarily taken up in small quantities. Again, the spat float in the water, more or less settling upon the shells at the bottom; but large quantities are unavoidably carried off by the tide.

The object of my invention is to obtain and secure the spat, and so that the sets may be readily removed from the surface upon which they are made in a more expeditious manner and without the loss which has hitherto accompanied this branch of oyster-raising; and the invention consists in a surface coated with an adhesive material—that is to say, a material which will adhere to the surface, but yet which is of a soft or plastic character—which is not affected by the water—as pitch—arranged beneath the surface of the water, so as to catch the spat, and so that the sets form on this coated surface and are readily removed without danger of destroying the sets.

In the best means for carrying out my invention I employ a flexible material, preferring cloth of some character, which I support in substantially a vertical position below the surface of the water, as shown in the accompanying drawings. This may be supported by driving a stake, as *a*, at one point and a second stake, *b*, at another and straining the cloth, *d*, between the two stakes; or a frame of any suitable character may be arranged to support the flexible material. One or both surfaces of this flexible material I coat with a suitable—preferably strong—adhesive material—such as pitch; or any suitable coating which will not be affected by the water may be applied. It will be understood that this coating is to be applied before the flexible material is submerged.

I prefer to arrange a series of these coated surfaces, as indicated in Fig. 2, a short distance from each other upon the oyster-grounds. The spat floating in the water come in contact with the coated surface of the flexible material, and, lodging there, the sets form, and when the proper time for removal arrives the flexible material is taken bodily from the water, and because of the nature of the coated material the sets are easily scraped from the surface and dislodged without danger of breakage or destruction. Then the flexible material may be retained for another season and reset.

The ready separation between the sets and the coated surface is due to the fact that the coated surface is very much softer than the shell of the sets—that is to say, the coating detaches from its surface with the shell and without danger of breaking the shell, which breakage necessarily results to a great extent when the shells are set upon a hard surface, and which does not give way in the removing of the shell.

The coated surface is not of necessity a flexible surface. It may be made from boards supported in the same manner with the surface coated. The sets will form on the sur-

face the same as on the flexible material; but I prefer flexible material because of more convenient handling and separation of the sets, as the flexible material may be more readily taken into the boat than boards of the same size could be.

While I prefer to arrange the coated surface in substantially a vertical position, as I have described—first, because the surface will be undisturbed by the washing of mud or sand thereon, and, second, because it permits a greater amount of surface on the same ground-space than could be were the coated space lying on the bottom—yet the coated surface may be placed flat upon the bottom of the oyster-grounds, so that the sets will settle thereon, as seen in Fig. 3, *e* representing the horizontal coated surface on the ground, it being retained in position by suitable stakes, *f*.

I believe from practical experience that pitch is the best material for coating the surface; but any suitable material which will not detrimentally affect the spat and will yet readily yield for the separation of the sets therefrom may be employed.

I make no claim in this application for the apparatus, as that will constitute the subject of an independent application.

I claim—

The herein-described method for obtaining oyster-spat, consisting in submerging and securing upon the oyster-grounds a surface coated with a soft plastic like material which adheres to the said surface, the said coating forming the surface upon which the sets may form, substantially as described.

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Witnesses:

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