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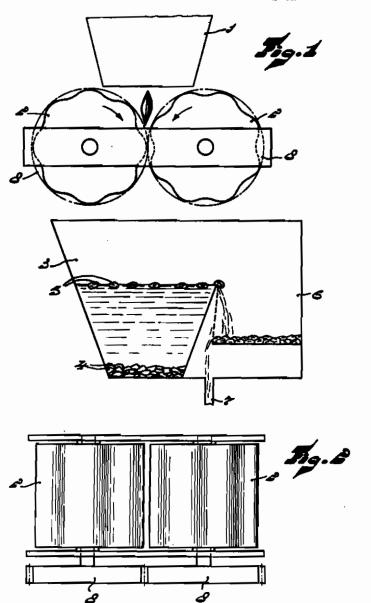
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BY A. P. C.

E. H. REERINK ET AL METHOD OF SEPARATING MEATS FROM THE SHELLS OF MOLLUSKS Filed April 8, 1941

Serial No. 387,514

2 Sheets-Sheet 1



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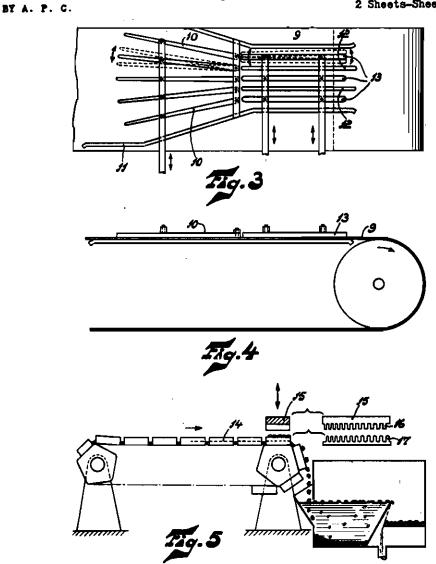
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ALIEN PROPERTY CUSTODIAN

METHOD OF SEPARATING SHELL AND FLESH OF CRUSTACEA

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Application filed April 8, 1941

As is well known, removal of the flesh from the shell of mussels and oysters is carried out by peeling by hand.

The present invention has for its object to remove the shell in a simple manner by a method which is not only adapted for mussels and oysters but also for other crustacea belonging to the lamelli branchiata.

According to the invention, for the purpose of detaching the flesh of the said crustacea the shell is crushed by mechanical treatment and this is followed by separation by a method based on the difference in specific weight of shell parts and flesh material.

According to one embodiment, after the shells have been crushed the material is introduced into a liquid in which the shell parts subside and the flesh material floats on the surface. Other methods of separation are, for example, rinsing by means of running water or fractional sedimentation in water.

The invention may be carried out with particularly satisfactory result if the crustacea are boiled or steamed either prior to or during the shell-crushing process. It is thus possible to carry the separation to a high degree, for example until more than 90% of the shell material is removed.

In order that the invention may be clearly understood and readily carried into effect it will now be described more fully with reference to the accompanying drawings.

Referring to Fig. 1, I designates a supply vessel for the crustacea from which the latter are fed between breaking rollers 2 with the result that the shell is crushed.

The material thus treated is then collected in a receptacle 3 containing a common salt solution in which the shell parts 4 subside and the flesh material 5 floats on the surface, the flesh being conducted away into a space 6 provided with a liquid-outlet 7.

Fig. 2 is a plan of the breaking rollers 2, 8 designating the gear wheels that serve for driving the breaking rollers.

Figs. 3 and 4 show a further embodiment of the invention. The crustacea are passed by means of a travelling band 9 between movable partitions 10 placed between stationary partitions 11. The crustacea are thus placed in a desired direction and are then fed to a cracking device which is constituted by stationary partitions 12 and movable partitions 13. The shells are crushed between the partitions of this system and, as described with reference to Fig. 1, the material is then introduced into a common salt solution for the purpose of separating the shell parts and the flesh material.

As an alternative, the shell parts may be crushed in the manner shown in Fig. 5. An articulate circulating band 14 leads the material to be treated past a cracking block 15. The llmbs of the band 14 and the cracking block 15 are provided with strip-shaped teeth 16 and 17 between which the shells are crushed. The material thus treated may then be introduced into a common salt solution, as is described with reference to Fig. 1.

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