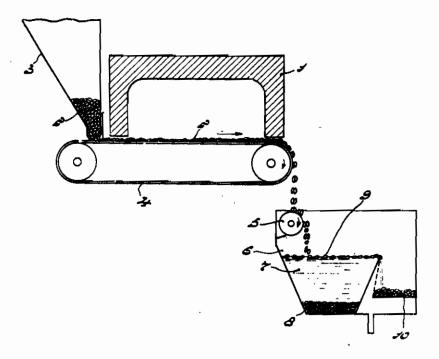
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J. E. GELDERMANS ET AL PROCESS OF SEPARATING SHELLS AND MEATS OF CRUSTACEA Filed April 8, 1941

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PROCESS OF SEPARATING SHELLS AND MEATS OF CRUSTACEA

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As is well-known, meats of mussels and oysters are removed from the shells by shelling by hand.

The present invention aims at removing the shell in a simple manner, which process is suitable not only for mussels and oysters, but also for other shell-fish belonging to the lamelli branchiata.

According to the invention, the said shell-fish are subjected to a short-time heating, for example of about 10 seconds, at a temperature due to which the meats are disjoined from the shells, preferably higher than 1000° C, this heating being followed by sorting shells and meats.

In this case use may advantageously be made of a process which is based on the difference in specific weights of shell particles and meats.

For a better understanding of the invention it is remarked that with this kind of animals the difficulty of the separation of shells and meats is due to the fact that the shells are joined with the meats by means of powerful muscles. As a result of the heating according to the invention, the muscles are released from the shells and the latter are opened, while an appreciable increase in temperature of the meats, which appear to lie loose in the shells in a substantially unabatedly raw condition, does not occur.

In order that the invention may be more clearly understood and readily carried into effect, it will be explained more fully by reference to the accompanying drawing.

Through an oven 1 passes a flow of hot gas obtained by burning anthracite, gas, oil or other fuels. The temperature of the hot gases with which the shell-fish 2 to be treated get into contact is about 1100° C. The shell-fish 2 are supplied from a feed container 3 to a grid 4 moving round and, after the hot-gas treatment which lasts for about 8 seconds, they tumble from a height of about 2 metres upon an abutment 5, the mass being subsequently taken up in a tank 6 containing a solution 7 of common salt. In this liquid the shell particles 6 settle down and the meats 9 are floated to the surface of the liquid and collected in a container 10.

If at the temperature stated above the time of heating is 4 seconds, the average temperature of the meats on leaving the oven is 48° C and, at a heating-time of 15 seconds, 55° C.

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