

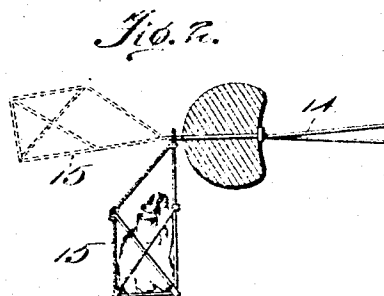
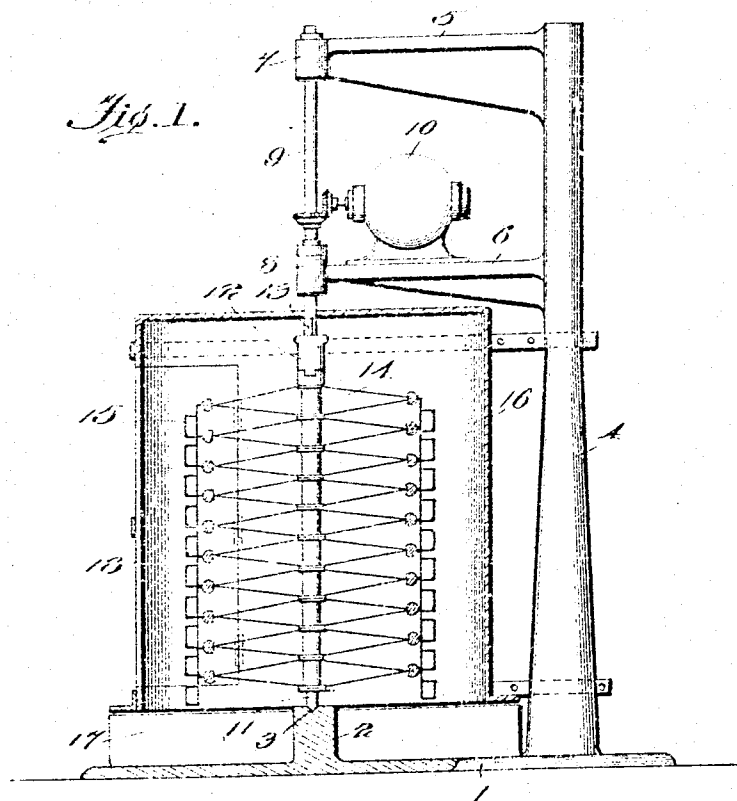
A. YANCEY.

METHOD OF REMOVING THE MEATY MATTER FROM THE SHELLS OF CRUSTACEA.

APPLICATION FILED MAY 27, 1909.

933,609.

Patented Sept. 7, 1909.



Witnesses
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ARTHUR YANCEY, OF BILOXI, MISSISSIPPI.

METHOD OF REMOVING THE MEATY MATTER FROM THE SHELLS OF CRUSTACEA.

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Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed May 27, 1909. Serial No. 498,740.

To all whom it may concern:

Be it known that I, ARTHUR YANCEY, a citizen of the United States, residing at Biloxi, in the county of Harrison and State of Mississippi, have invented certain new and useful Improvements in Methods of Removing the Meaty Matter from the Shell of Crustacea; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention is for a method for removing the meaty matter from the shell of crustacea generally, but for simplicity of description I simply refer to the common crab by way of illustration, it being understood, however that the method is equally applicable for use in connection with the shucking of lobsters, shrimp, and similar fish.

In a separate application, filed May 27, 1909, Serial Number, 498,741, and covering apparatus for shucking crustacea, I have pointed out various difficulties, now arising, in shucking crustacea for purposes of canning, and briefly stated the present method has been devised for the purpose of convenience and cleanliness.

Many different forms of apparatus may be employed in carrying out the present method, and in the apparatus application referred to I have illustrated and described different forms both for the manipulation of the crustacea being shucked and also specific means for retaining the crustacea securely on its support, but in the present application, for the purpose of simplicity of illustration I shall simply refer to one of these forms. I shall now describe my method illustrating the accomplishment of the same by the accompanying drawings, in which the same numerals refer to the same parts in the two views, and in which—

Figure 1 is a view in side elevation, the cylindrical guard being shown in longitudinal section, to show the internal mechanism. Fig. 2 is a transverse sectional view through the carrier support, one of the carriers being shown in full lines in the position it assumes when the machine is not running, and in dotted lines in the position it assumes when the machine is running.

1 designates a base, and 2 a bearing thereon provided with a recess 3, the base being also provided with a standard 4 having lateral arms 5 and 6 supporting bearings 7 and

8 in which is journaled the driving shaft 9, driven by the motor 10 through interposed bevel gears.

11 is a carrier shaft detachably connected to the driving shaft 9 by means of the clutch arrangement 12 cooperating with the feather or key 13. This carrier shaft is provided with a plurality of carrier supports 14 illustrated as being constructed on the lines of the ordinary bicycle wheel.

15 designates a plurality of carriers carried by each of the supports 14, and these carriers are mounted to swing outwardly on the rim, as clearly shown in Fig. 2, the position of the carriers when the same are being filled with the sections of crab, being shown in full lines, and their position when the machine is in operation being shown in dotted lines.

16 represents a guard surrounding the carriers, for the purpose of deflecting the meaty matter into the receptacles or pans 17 located at the open end of the guard. The guard is also provided with suitable doors 18 for removing the detachable shaft and carriers, all as described in detail in my apparatus application previously referred to.

In carrying out the method the body of the crab is first denuded as usual, and the body is then divided, either by breaking or cutting, on a line transversely of the lobes or cells, and while this is preferably done centrally of the crab in order to expose the inner or opposed ends of the lobes on both sides, still the line of severance may be in any plane substantially transverse of the same. It will also be understood that the claws, which contain considerable meaty matter, may be similarly treated either by breaking or cutting. The portions of the crabs being shucked, whether it be the body or the claws, are then placed upon a suitable support in such a manner that the shells are restrained on said support while the meaty matter is being removed by an acting force disposed substantially coincident with the disposition of the lobes. This action is illustrated in the drawings, wherein there is provided a rotary support having the crab sections so disposed thereon that in operation the lobes or cells lie in a direction substantially radial to the support, with the exposed meat free to be removed without retardation. That is to say, said meat is removed without any hindering means, being interposed between the crab support and the

deflecting guard, as contradistinguished from an arrangement whereby a foraminous or strainer member, with many small perforations is employed, and through which a liquid might be strained, but which would retard any solid substance like crab meat. The extraction of the meat is furthermore aided by the well known act of cooking the crab before picking it. For it is recognized that cooking the crabs not only loosens the meat from the walls of the cells, but it, in practice, is also recognized as essential to preserve the meat for shipment and subsequent consumption.

It will be obvious, that in the particular apparatus shown for carrying out the present method, that when the driving shaft 9 is rapidly rotated the carrier supports mounted on the detachable shaft will also be rapidly rotated, which will cause the swinging carriers 15 to swing upwardly and outwardly, owing to centrifugal action, until they assume the position shown in dotted lines in Fig. 2, in which position the action of centrifugal force will throw the meat from out of the restrained shells, so that the meat is deflected by the guard into the receiving pans, while the shells are retained on the supports and the supports may be removed as an entirety with the denuded shells, while a new support with filled shells may be placed in the machine and the method of extraction continued while other supports are being prepared by the operatives.

Having thus described one form of apparatus with which my method may be carried out, what I claim is:—

1. The method of separating the meaty matter from the shell of crustacea, which consists in denuding the body portion of its back shell and appendages; in dividing the portion to be shucked, on a line transversely of the lobes or cells; in securing the shell portion on a suitable support which will permit the free escape of said meaty matter from said cells; and finally creating a removing force directed substantially in alignment with the lobes or cells, for removing said meaty matter while retaining the shell.

2. The method of separating the meaty matter from the shell of crustacea, which consists in denuding the body portion of its back shell and appendages; in separating the portion to be shucked on a line transversely of the lobes or cells; in securing the shell portion on a support which will permit the free escape of said meaty matter from said cells; and finally imparting a rotary motion to said support while restraining the shells.

3. The method of separating the meaty matter from the shell of crustacea, which consists in denuding the body portion of its back shell and appendages; in dividing the portion being shucked on a line transversely of the lobes or cells; in securing the shell portion on a rotary support with the lobes or cells containing meaty matter disposed substantially radial to said support which will permit the free escape of said meaty matter from said cells; and finally imparting a rotary motion to said support for throwing out the meaty matter while restraining the shell.

4. The method of separating the meaty matter from the shell of crustacea which consists in cooking the same to loosen the meat in the cells; then dividing the portions to be shucked on a line passing transversely of the lobes or cells; then securing the shell portions on a suitable support which will permit the free escape of said meaty matter from said cells; and finally creating a removing force directed substantially in alignment with the lobes or cells for removing the meaty matter while restraining the shells.

5. The method of separating the meaty matter from the shell of crustacea, which consists in denuding the body portion of its back shell and appendages; in dividing the portions being shucked on a line passing substantially central of the crab and transversely between the opposed lobes or cells; in securing the shell portions on a support which will permit the free escape of said meaty matter from said cells; and finally creating a removing force directed substantially in alignment with the lobes or cells for removing the meaty matter while restraining the shells.

6. The method of separating the meaty matter from the shell of crustacea, which consists in cooking the crabs sufficiently to loosen the meat in the cells; in denuding the body portion of its back shell and appendages; in dividing the portions to be shucked on a line passing substantially transversely of the opposed lobes or cells; in securing the shell portions on a suitable support; and finally creating a removing force directed substantially in alignment with the lobes for removing the meaty matter while restraining the shells.

In testimony whereof, I affix my signature, in presence of two witnesses.

ARTHUR YANCEY.

Witnesses:

H. T. McKEEVER,
J. S. GINSTE.