(No Model.) 2 Sheets—Sheet 1.

# J. G. BAKER.

## CHERRY STONER.

No. 264,217. Patented Sept. 12, 1882.

FIG. 1.

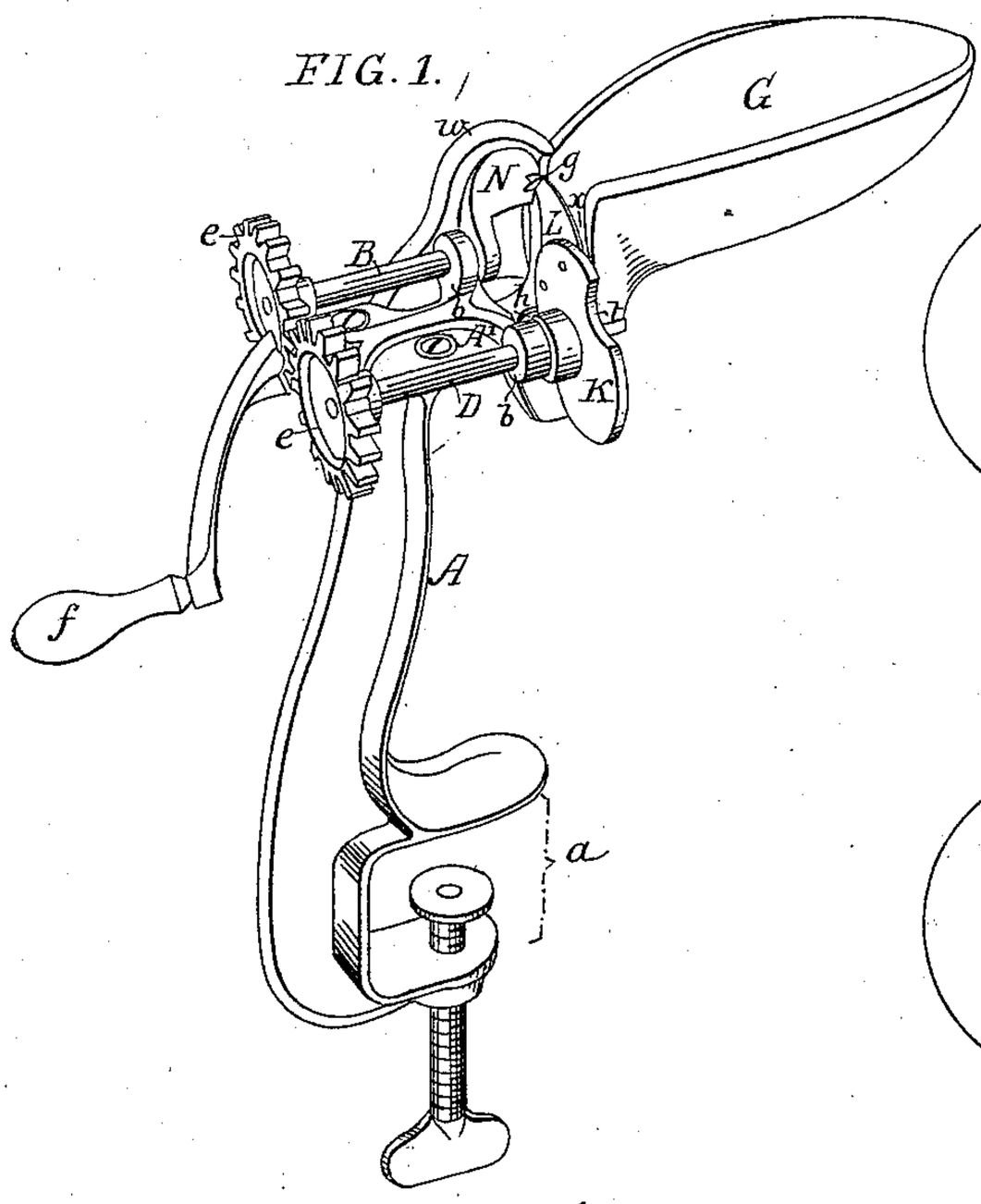



FIG. 5.

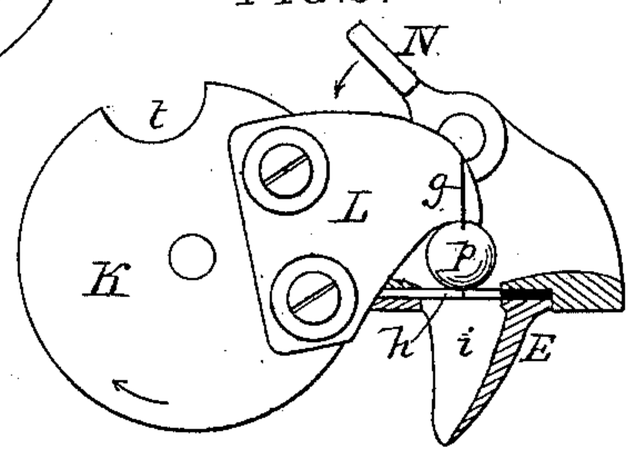



FIG. 6

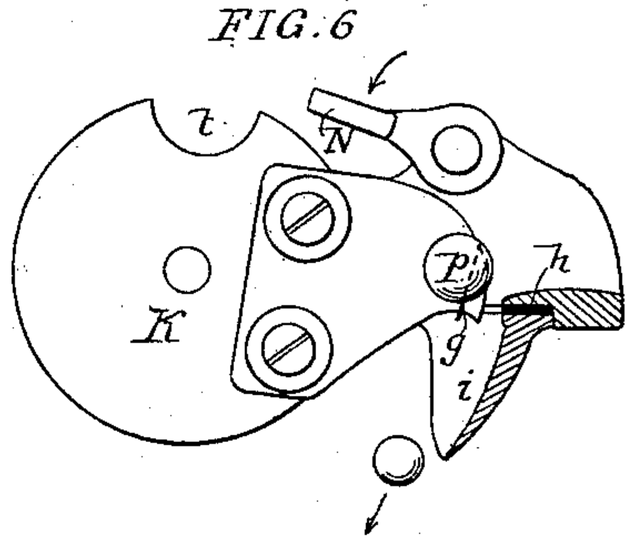



FIG. 2.

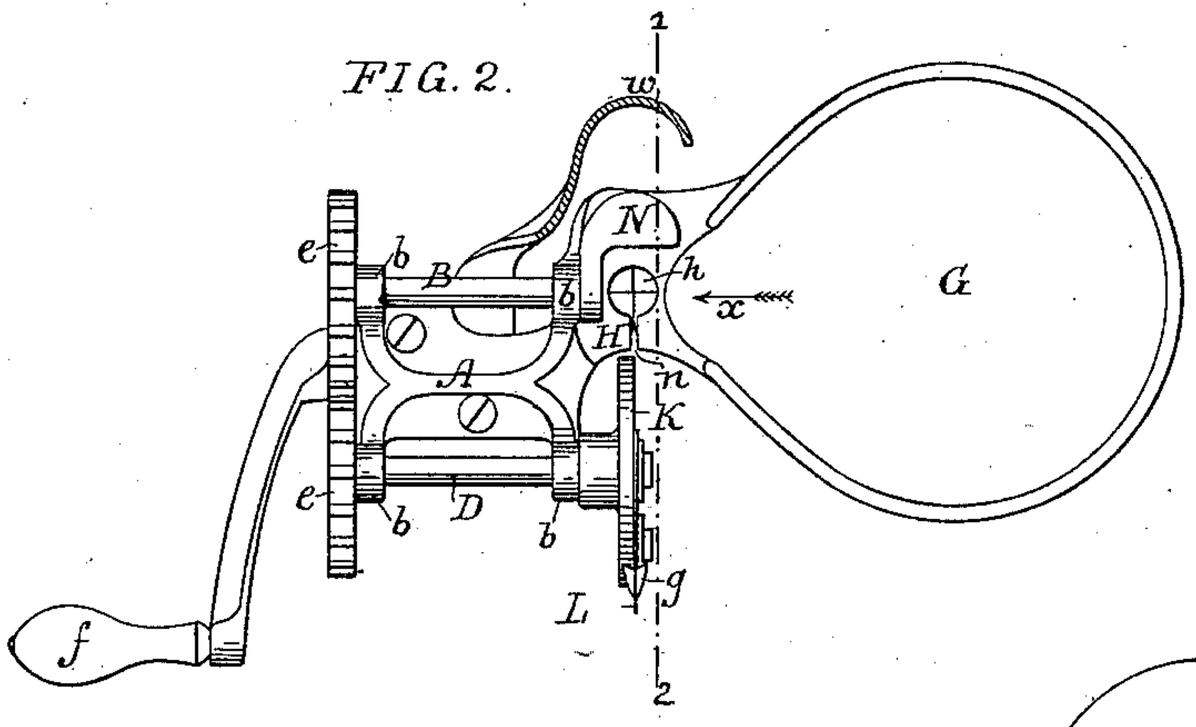



FIG. 8

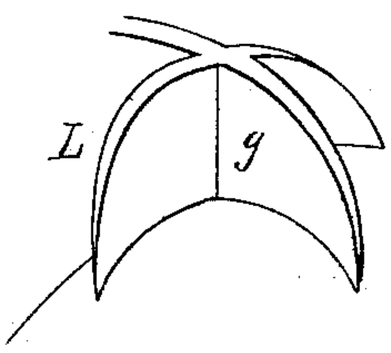



FIG. 4

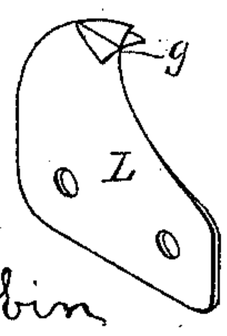
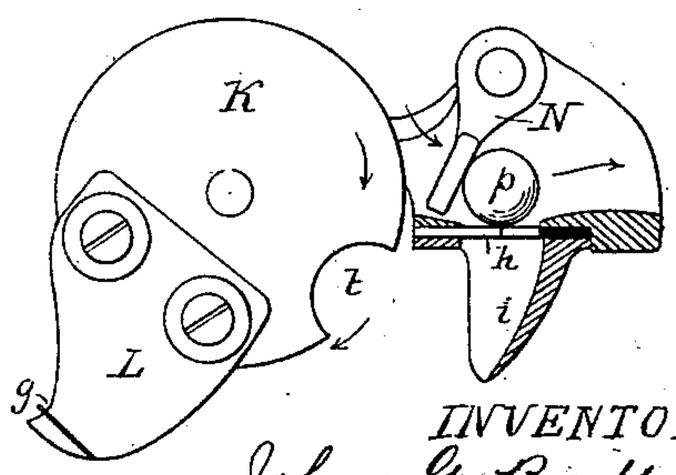



FIG. 7.

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(No Model.) 2 Sheets—Sheet 2.

# J. G. BAKER.

## CHERRY STONER.

No. 264,217. Patented Sept. 12, 1882.

FIG. 9.

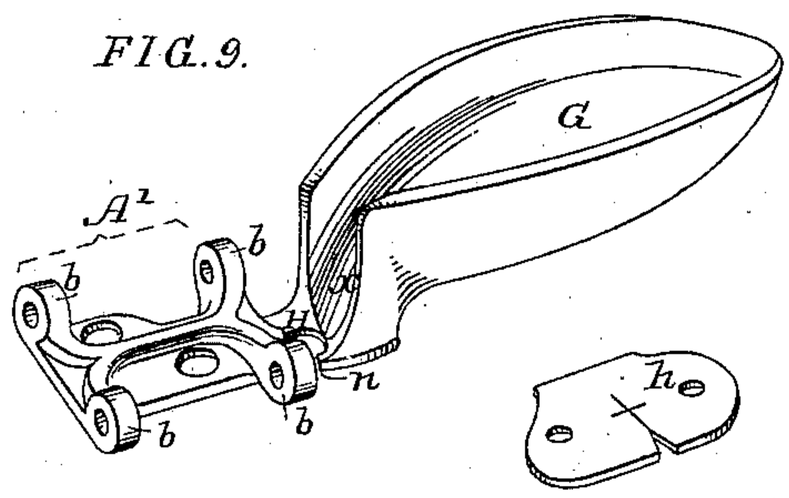






FIG. 10.

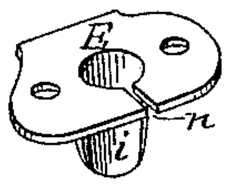



FIG. 11.

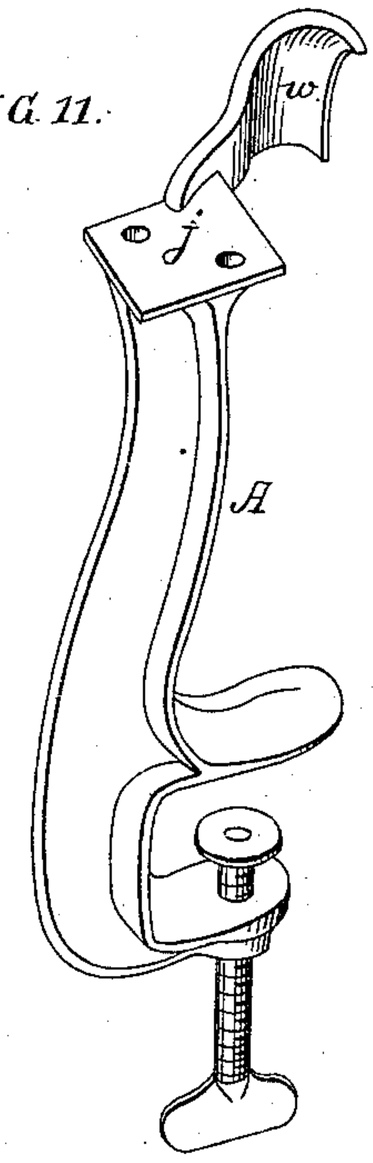
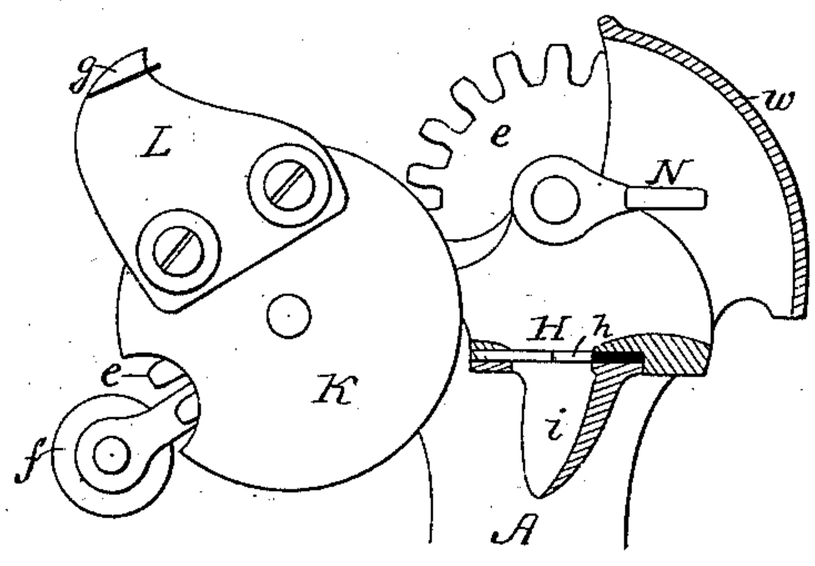



FIG. 3




WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN G. BAKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE ENTERPRISE MANUFACTURING COMPANY, OF SAME PLACE.

## CHERRY-STONER.

SPECIFICATION forming part of Letters Patent No. 264,217, dated September 12, 1882.

Application filed July 15, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN G. BAKER, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Cherry-Stoners, of which the following is a specification.

My invention consists of certain improvements, fully described hereinafter, in that class of cherry-stoning machines in which the stone is separated from the pulp by placing a cherry on a yielding diaphragm having slits and forcing the stone from the pulp and through the said diaphragm.

In the accompanying drawings, Figure 1, Sheet 1, is a general perspective view of my improved cherry-stoner; Fig. 2, a plan view; Fig. 3, Sheet 2, a vertical section on the line 1 2, Fig. 2, looking in the direction of the arrow; Fig. 4, Sheet 1, a detached perspective view of the blade; Figs. 5, 6, and 7, diagrams illustrating the operation of the machine; Fig. 8, an enlarged view of the outer end of the stoning-blade; and Figs. 9, 10, and 11, Sheet 2, perspective views illustrating the mode which I prefer of constructing the frame-work of the machine.

The frame A, Fig. 1, terminates below in a clamping device for the attachment of the machine to a table; but it will be understood that the frame may be constructed with a base for resting on or for attachment to a table in different ways. The upper portion of the frame has bearings *b b* for the shafts B and D, which are geared together by cog-wheels *e e*, so as to revolve at the same speed, one or other of the shafts being furnished with a suitable handle, *f*.

G is the hopper for receiving the fruit, this hopper being inclined, so that there will be a tendency of the cherries toward the throat *x* of the hopper, which throat is so contracted that not more than one cherry at a time can pass through it and into a recess or pocket, H. At the bottom of this pocket is an elastic diaphragm, *h*, secured to the frame over an opening therein, and having incisions which in the present instance are of a cruciform shape, so as to present elastic lips, which will yield to the passage of a cherry-stone, but will, immediately after the passage of the stone, resume their normal condition, which is that of a base for supporting a cherry during the operation described hereinafter. The flange of the hopper is discontinued at the throat, and there is a slot, *n*, in the frame, communicating with the opening closed by the diaphragm, this slot coinciding with one of the incisions made in the said diaphragm.

To the shaft D is secured a disk, K, and to the latter is attached a blade, L, having several cutting-edges, *g*, which I prefer to arrange in the manner shown in Fig. 8, where it will be observed that the cutting-edges are hooked, so that on striking the stone the latter cannot slip away, but must remain under the influence of the cutter until it is forced away from the pulp.

To the shaft B is secured an arm, N, which I will term the "clearer," as its duty is to remove the pulpy part of the cherry from the pocket H after the cherry has been stoned.

Referring to Fig. 5, it will be seen that the blades *g* of the cutter L are about to make incisions in the cherry *p*, which is lodged in the pocket H on the diaphragm *h*. As the cutter pursues its course in the direction of the arrow it will, after making its way through the pulp of the cherry, strike the stone, and with a claw-like action seize the upper portion of the same and drive it through the diaphragm, on which the pulp will remain. In the meantime the clearer N has been approaching a position where its duty commences, and when the blade L is entirely clear of the cherry the latter, which has been deprived of its stone, will be dislodged by the clearer from the pocket H, whence it will fall into any suitable receptacle, another cherry from the hopper being lodged in the pocket, ready to be operated upon in the manner described.

An arm carrying the blade L might be substituted for the disk K; but I prefer the latter, as it helps to keep the cherry in place before it is struck by the cutters. When the cutters first strike the cherry they have a tendency to cause the juice to fly from the same, and in order to prevent inconvenience on this account I arrange adjacent to the pocket H a shield or guard, *w*. There is a recess, *t*, in the disk for admitting the clearer at one point in the revolution of the disk and clearer—an arrangement

which permits the clearer to revolve in the desired course in relation to the pocket for performing its duty properly.

In carrying out the above features of my invention it is not essential to adhere to the precise style of frame-work shown; but the structure is of such simplicity and the parts which compose the frame are so easily put together that I will proceed to describe the said frame more minutely, because I look upon it as an important feature of my invention.

It will be seen on reference to Fig. 9, Sheet 2, that the hopper G and plate A′ (the latter being constructed for attachment to the top *j* of the stand A) are cast in one piece, and that in the casting are comprised the shaft-bearings *b b* and pocket H. The shield *w* is cast on the stand A, and the small casting E, constructed for attachment to the under side of the plate A′, serves to confine the elastic and partly-severed diaphragm *h* to the said plate, the said casting E having the slot *n*, previously referred to, and a chute, *i*, for directing the stones into any receptacle apart from that which receives the pulpy part of the cherry.

To those familiar with foundry operations the facility with which the molds for the above castings can be made will be readily understood. The most important feature of my invention, however, is the combination of the rotating blade L with the pocket and its elastic partly-severed diaphragm.

The front edge of the blade L is inclined, so that if a cherry, in entering the pocket, rolls beyond the center of the same, the inclined edge of the cutter, as the latter revolves, will act upon the cherry and restore it to its proper position before the cutters *g* commence to act upon it.

I claim as my invention—

1. The combination, in a cherry-stoner, of a rotating blade with an elastic diaphragm having incisions, one of which extends through the edge of the diaphragm for the passage of the blade, substantially as described.

2. The combination of the inclined hopper G, having throat *x*, the pocket H, and partly-severed diaphragm with a rotating blade, substantially as set forth.

3. The combination of the hopper G, its throat, the slotted pocket, and partly-severed diaphragm with the rotating disk and its blade, substantially as specified.

4. The combination, in a cherry-stoner, of a partly-severed diaphragm for supporting a cherry, a rotating blade for striking the stone from the cherry, and a rotating clearer for removing the pulp from the diaphragm, all substantially as described.

5. The combination of the rotating disk K, carrying the blade, and having a recess, *t*, with the rotating clearer N.

6. The combination of the diaphragm for supporting a cherry, the rotating stoning-blade L, and the shield *w*, substantially as specified.

7. The combination of the hopper G, its throat *x*, and pocket H, and the plate A′, with its bearings *b*, the whole being cast in one piece, and constructed to form the upper part of the frame of a cherry-stoner, as set forth.

8. The combination of the hopper G and plate A′ with a casting, E, adapted to confine the elastic diaphragm to the plate, and having a chute, *i*, for directing the stone, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN G. BAKER.

Witnesses:
HARRY DRURY,
HARRY SMITH.