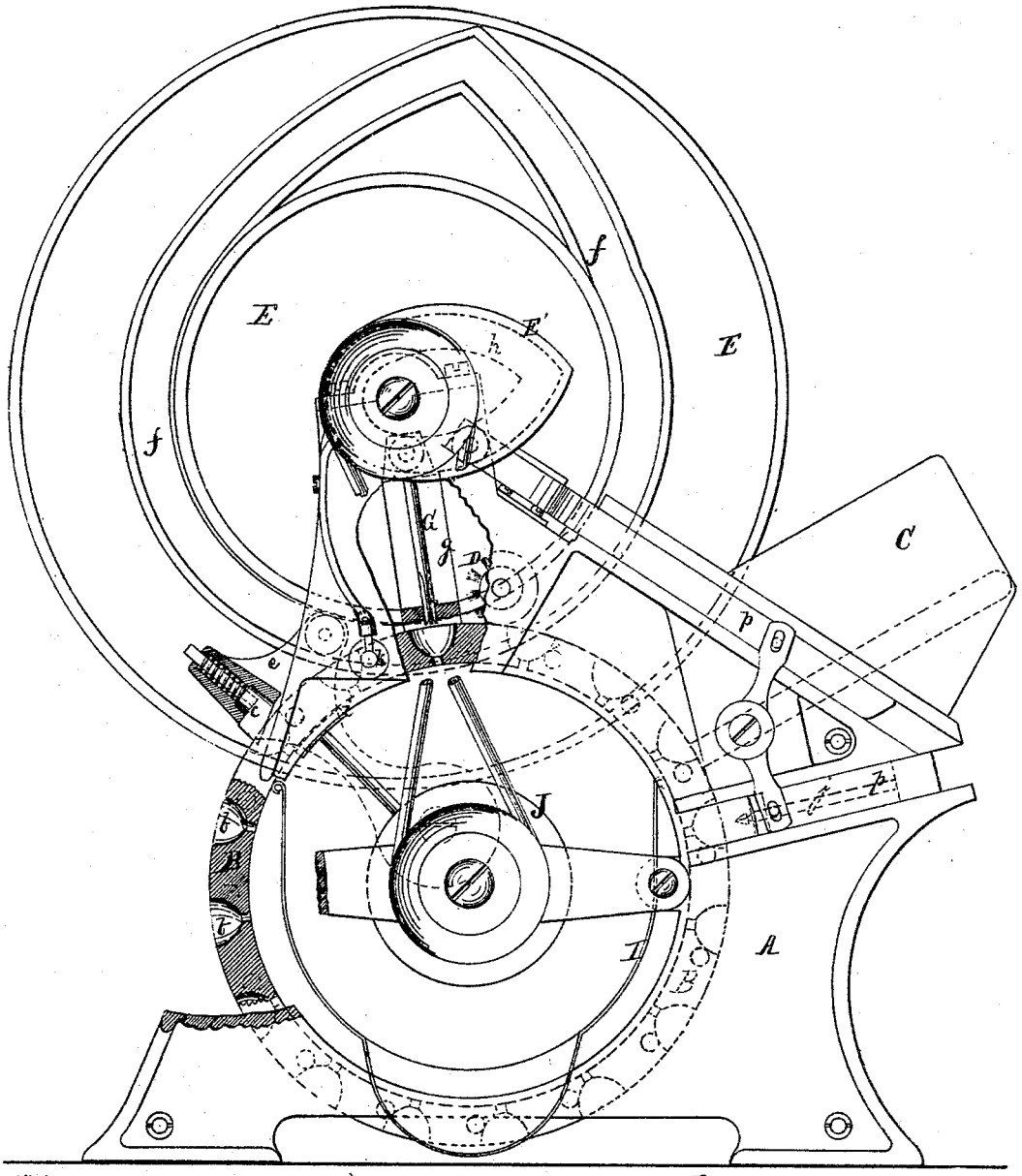
3 Sheets—Sheet 1.

S. A. DARRACH.

CHERRY-STONER.

No. 169,525. Patented Nov. 2, 1875.

Fig. 1.



Witnesses.
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Chas. Wahlers.

Inventor.
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his attys

3 Sheets—Sheet 2.

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CHERRY-STONER.

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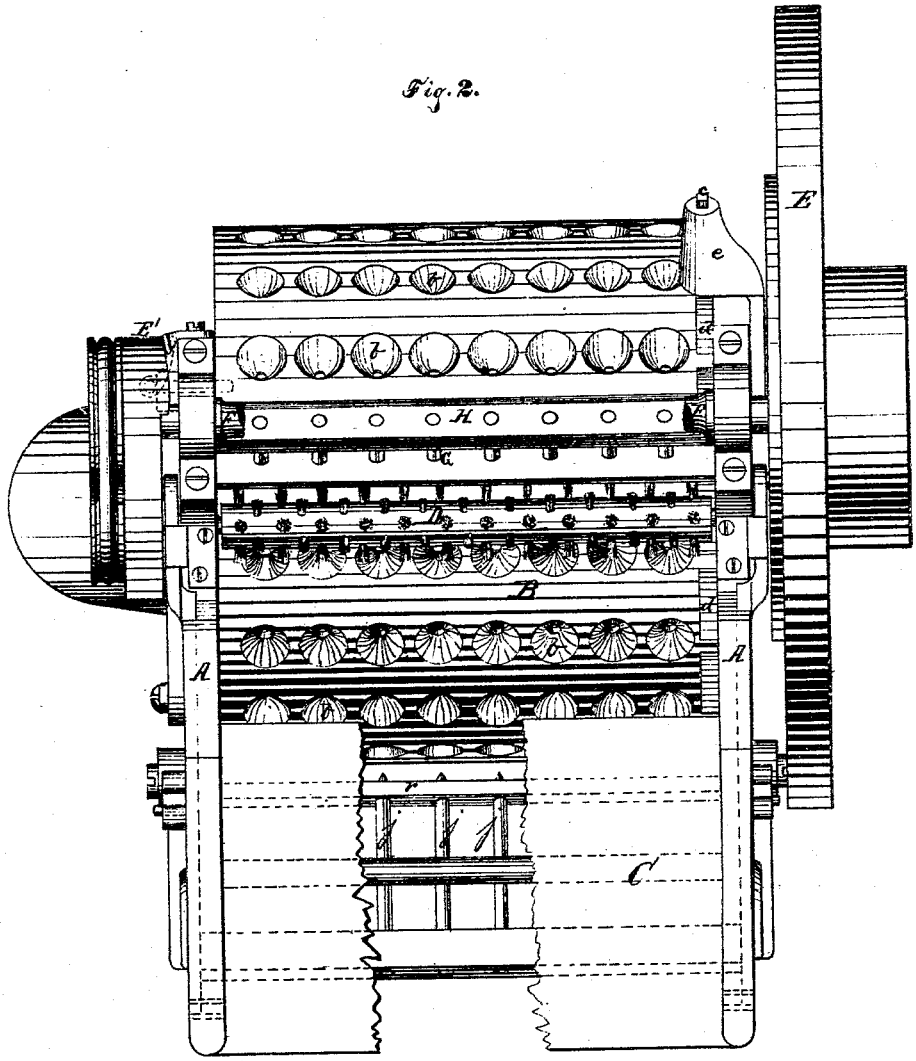
Fig. 2.



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3 Sheets—Sheet 3.

S. A. DARRACH.

CHERRY-STONER.

No. 169,525. Patented Nov. 2, 1875.

Fig. 3.

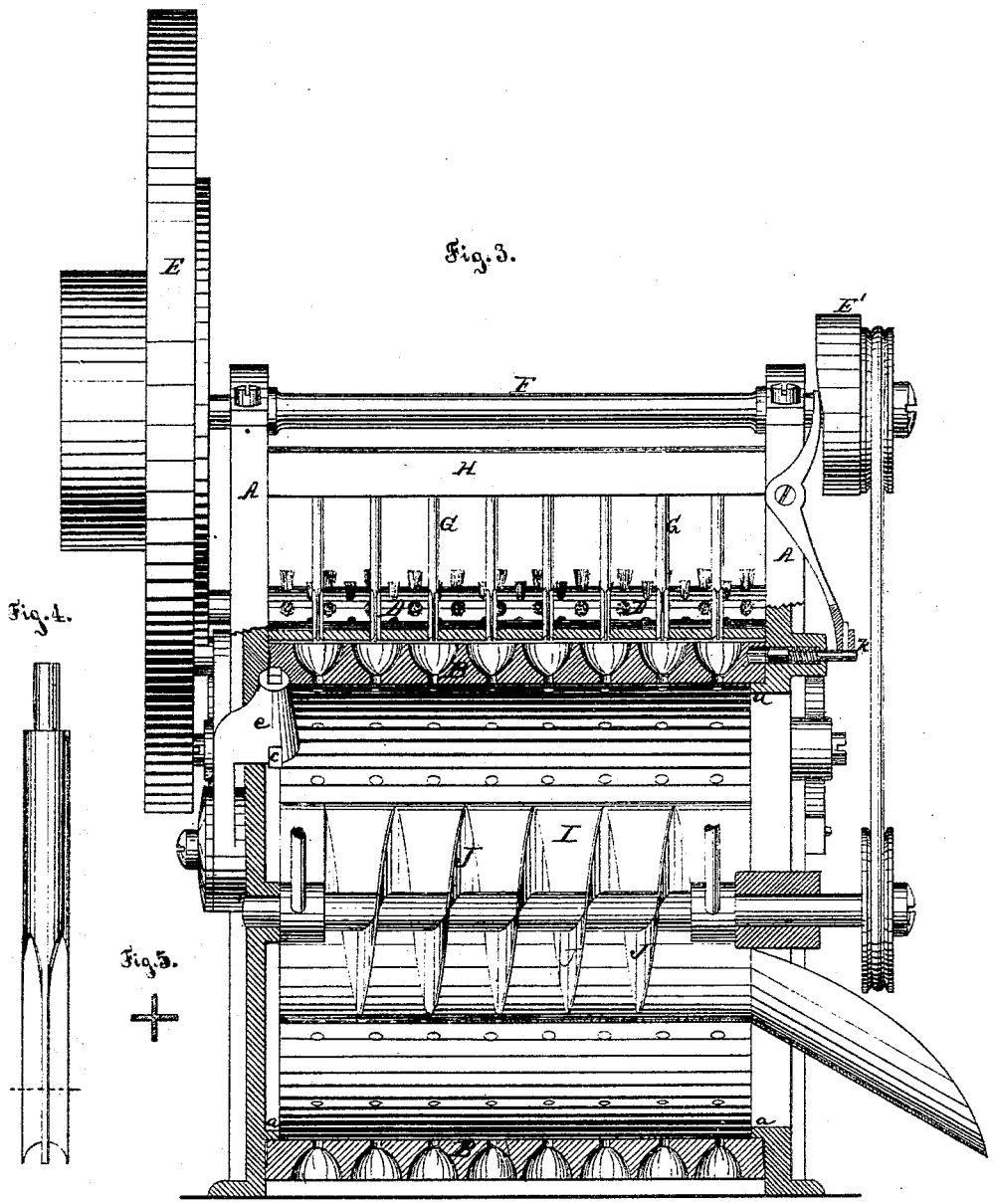

Fig. 4.

Fig. 5.

Witnesses

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Chas. Wahlers

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UNITED STATES PATENT OFFICE.

SAMUEL A. DARRACH, OF ORANGE, NEW JERSEY.

IMPROVEMENT IN CHERRY-STONERS.

Specification forming part of Letters Patent No. **169,525**, dated November 2, 1875; application filed August 28, 1875.

To all whom it may concern:

Be it known that I, SAMUEL A. DARRACH, of Orange, in the county of Essex and State of New Jersey, have invented a new and Improved Cherry-Stoner, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a sectional side elevation. Fig. 2 is a plan or top view. Fig. 3 is a vertical section in the plane *x x*, Fig. 2.

Similar letters indicate corresponding parts.

This invention consists in a hollow cylinder, which is provided with a large number of cells for the reception of the cherries to be stoned, and to which an intermittent rotary motion is imparted, in combination with a series of plungers, which are depressed at the proper intervals, so as to force out the pits of the cherries contained in the cells of the cylinder. The cherries are delivered automatically to the cells of the cylinder by means of an inclined feed-trough, and the surplus cherries are thrown off from the cells by the action of a revolving brush. In the interior of the stoning-cylinder is a trough for the reception of the pits, which are carried off by an endless screw. With this pit-trough is combined a scraper, to throw off such pits which may adhere to the interior surface of the stoning-cylinder. With the cells of the stoning-cylinder are combined barbed clearers to remove those cherries which may adhere to the cells.

In the drawings, the letter A designates a frame, the side pieces of which are formed with annular flanges *a* on their insides, over which the ends of the hollow cylinder B sit, and on which said cylinder revolves. This cylinder is provided with a number of cells, *b*, each large enough to receive a cherry, and each provided with a hole, which opens into the interior of the cylinder, and is large enough to allow an ordinary-sized cherry-pit to pass. The cherries are fed to the cells of the cylinder over an inclined trough, C; and, if two cherries should lodge in one cell, the surplus cherries are swept off by a brush, D, leaving one cherry in each cell. The cylinder B receives an intermittent rotary motion by means of a dog or pawl, *c*, which engages with notches *d* in the circumference of the cylinder, and which is secured to a lever, *e*, to which a vibrating motion is imparted by a cam-groove, *f*, formed in a disk, E, which is mounted on the driving-shaft F. This cam-groove is of such a shape that, by each motion imparted to the cylinder, a fresh row of cells is brought under the plungers G. These plungers are secured in a head, H, which is guided in slots *g* in the side pieces of the frame A, while its ends engage with cam-grooves *h*, one of which is formed in the disk E, and the other in a disk, E′, mounted on the opposite end of the driving-shaft F. As the plungers are depressed they carry the pits of the cherries contained in the cells down into the hollow space of the cylinder, where they are caught by a trough, I, which is fastened to one of the side pieces of the frame A, and extends out through the opening in the opposite side piece. In this trough works an endless screw, J, which receives its motion from the driving-shaft F, and which serves to carry the pits out at the open end of the trough I. Said endless screw has its bearings on one end in the side piece of the frame A, and on the other end in a bridge; and from these bearings extend arms, which support a scraper, *i*, Fig. 1, which is intended to remove such of the pits that may adhere to the inner surface of the cylinder B. A stop, K, retains the cylinder in position while the plungers take action. This stop is moved by a cam, and it is thrown out of gear with the stoning-cylinder just before the pawl *c* takes action.

As the motion of the cylinder continues, the bodies of the cherries discharge from the cells by their own gravity; but, in order to clear the cells, if one or the other of said bodies should adhere to them, I have applied barbed clearers *j*, which receive their motion by the cam-grooves *h* and slides *p*. As these clearers are forced into the cells they pierce the bodies of such of the cherries as may have adhered to the cells, and, as the clearers return, these bodies are carried back and stripped from the clearers by the perforated bar *r*.

The plungers G are made with cross-shaped cutting-edges, as shown in Figs. 4 and 5, each end of the cross being provided with a projecting point, so that, when the plunger descends on a cherry, it produces a cross-cut through the skin and pulp; and after the pit

has been expelled, and the plunger has been withdrawn, the skin closes up, and the body of the cherry reassumes its original shape. In some instances, however, the body of the cherry is burst open, and then it is liable to adhere to the cell.

The trough I, which receives the pits, is perforated, so that the juice passes through, and allows the pits to be carried off as clean as circumstances will allow.

What I claim as new, and desire to secure by Letters Patent, is—

1. The pit-receiving trough I and endless screw J, in combination with the cylinder B and plungers G, substantially as set forth.

2. The combination of the rotary cylinder B, having the cells *b*, with the perforated bar *r*, barbed clearers *j*, cam-grooves *h*, and slides *p*, for operating the clearers to clear the cells, substantially as described.

3. In combination with the cylinder B, provided with cells *b*, and containing the pit-receiving trough I and endless screw J, the plungers G, clearing-brushes D, and barbed clearers *j*, all constructed and arranged to operate substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 21st day of August, 1875.

S. A. DARRACH. [L. S.]

Witnesses:
W. HAUFF,
E. F. KASTENHUBER.