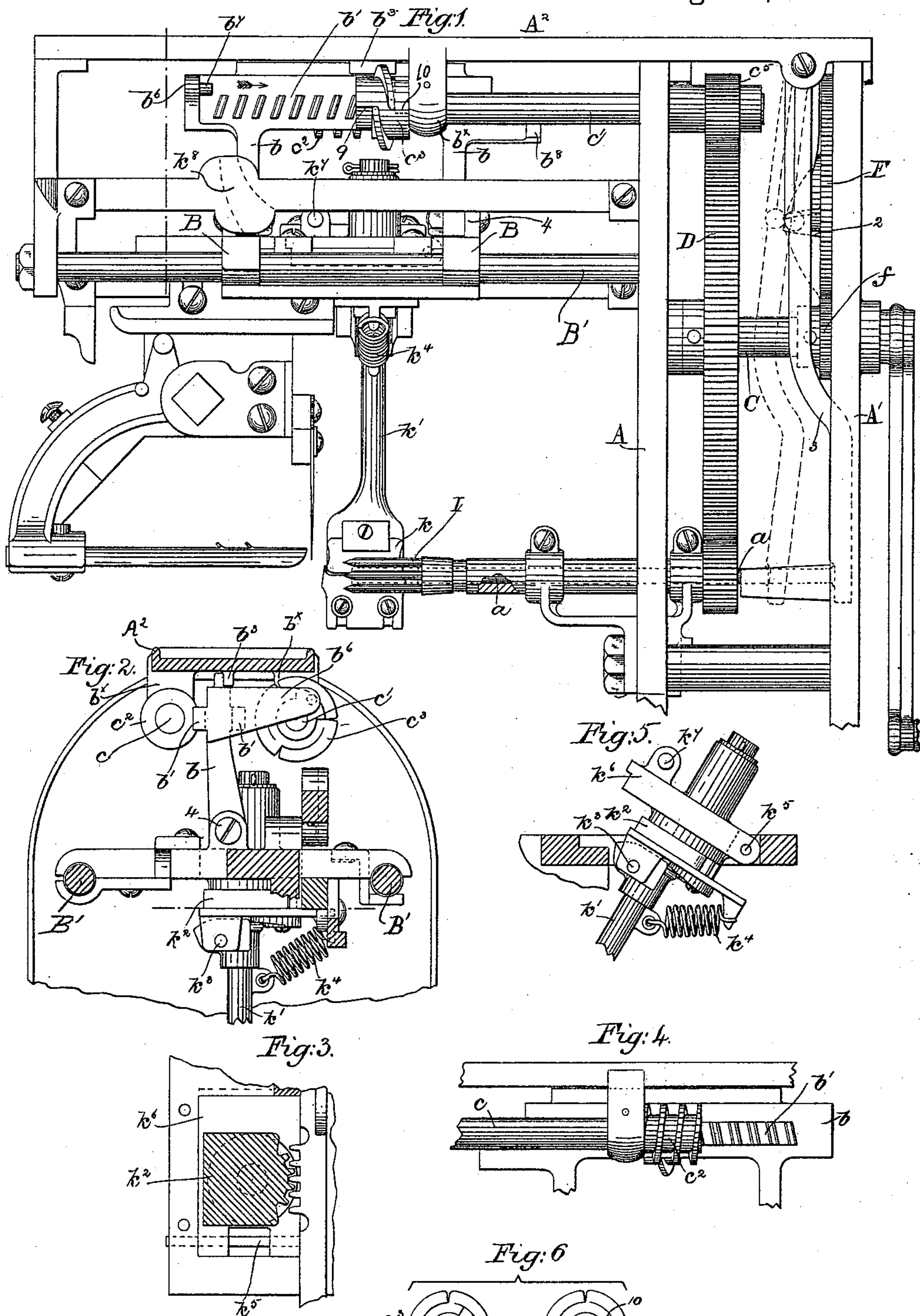


(No Model.)

W. A. C. OAKS.
FRUIT PARER.

No. 434,398.

Patented Aug. 12, 1890.



Witnesses:

Fred. S. Greenleaf
Maurice L. Emery

Inventor:

William A. C. Oaks
by Lamb & Gregory Attys.

UNITED STATES PATENT OFFICE.

WILLIAM A. C. OAKS, OF ANTRIM, NEW HAMPSHIRE, ASSIGNOR TO THE
GOODELL COMPANY, OF SAME PLACE.

FRUIT-PARER.

SPECIFICATION forming part of Letters Patent No. 434,398, dated August 12, 1890.

Application filed June 13, 1889. Serial No. 314,115. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. C. OAKS, of Antrim, county of Hillsborough, State of New Hampshire, have invented an Improvement in Fruit-Parers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings, representing like parts.

This invention has for its object to improve the construction of the apple-parer shown and described in United States Patent No. 397,871, dated February 12, 1889, and has particular reference to the quick return movement of the knife-carriage, and also in arranging the yielding paring-knife on a tilting frame.

Figure 1 shows in side elevation a sufficient portion of a fruit-paring machine to disclose my invention; Figs. 2, 3, 4, 5, and 6, details to be referred to.

The frame A A' A² contains the shaft C, carrying the pinion *f* and spur-gear D. The pinion *f* engages a spur-gear F, having at one side a cam or projection 2, which during each revolution of the gear F strikes a pend-ent or loosely-suspended arm 3 and moves the latter outwardly. The lower end of this arm 3 rests against the rear end of the push-off rod *a*, which slides in bearings in the frame-work and protrudes centrally through the fork 1, the movement of said arm 3 therefore moving the push-off rod *a* outwardly.

The knife-carriage B slides, as usual, in suitable guideways B', and on it is pivoted at 4 a frame or plate *b*, having near its upper edge and at each side a rack or worm-rack *b'*. (See full lines, Fig. 1, and full and dotted lines, Fig. 2.)

A projection *b*³, serving as a guide, rigidly depends from the overhanging frame of the machine, and as the knife-carriage reciprocates it follows the said guide first on one and then on the other side.

Two shafts *c c'* have their bearings in the arms *b*^x, depending from the frame A², said shafts lying parallel—one on each side of the pivoted frame *b*—and carrying worms *c*² *c*³ at one end and pinions *c*⁵ at the other end. The pinions *c*⁵ of the shafts *c c'* engage the spur-gear D, so that as said gear is revolved the shafts *c c'* will be revolved.

The frame *b* has at one end a projection *b*⁶, having a pin *b*⁷, and at the other end has a projection *b*⁸, and the worm *c*³ is formed with two shoulders 9 and 10. (See full and dotted lines, Fig. 1.)

The frame *b* is moved in the direction of the arrow thereon by means of the worm *c*² until the pin *b*⁷ is engaged by the shoulder 9, and the frame is pulled toward and into engagement with the said worm *c*³, the end of the frame at such time passing by the projection *b*³. The frame *b* is then moved in the direction opposite to the arrow thereon by means of the worm *c*³ until the projection *b*⁸ is engaged by the shoulder 10, thereby pushing the frame away from the said wheel and into engagement with the worm *c*², it passing by the projection *b*³ at the opposite end. The frame *b* and knife-carriage are thus reciprocated. The worm *c*³ is made larger in diameter than the worm *c*², and hence will return the knife-carriage faster than it was moved by the worm *c*², the worm-racks *b'* being substantially alike.

The paring-knife *k* is secured to the arm *k'*, pivoted to the plate *k*² at *k*³, and held in position by a spring *k*⁴. The plate *k*² has its bearings in the frame or plate *k*⁶, which is pivoted at *k*⁵ to the knife-carriage. A pin *k*⁷ projects from the plate *k*⁶, which, when the knife-carriage is moved to carry the knife away from the fork, will enter the curved groove *k*⁸ in a part of the main frame, (see dotted lines, Fig. 1,) by which the frame is tilted, so that the knife is carried completely away from the fork.

I claim—

1. In a fruit-parer, a reciprocating knife-carriage combined with the pivoted frame *b* thereon having a worm-rack at each side and having two projections, one at each end, and the guide *b*³ for said frame, two worms located one at each side of said frame, one of which has shoulders which engage alternately with first one and then the other of the projections of the frame *b* and positively move it on its pivot, substantially as described.

2. In a fruit-parer, a reciprocating knife-carriage combined with the pivoted frame *b*, having a worm-rack rigidly attached thereto at each side, and two worms—one at each side of

said frame and independent thereof—one for moving the carriage in one and the other in the opposite direction, a guide b^3 for said frame, and means actuated by one of said worms, substantially as described, for positively moving the frame past the guide b^3 and into engagement with one or the other worm, substantially as described.

3. In a fruit-parer, the automatically-reciprocating knife-carriage, combined with the yielding knife-carrying arm, the tilting frame or plate therefor pivoted to the knife-carriage

and provided with a pin k^7 , and the cam-groove k^8 , formed in a portion of the main frame and into which said pin enters to tilt the frame, substantially as described.

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

WILLIAM A. C. OAKS.

Witnesses:

W. E. CRAM,

H. P. KIMBALL.