(No Model.)

L. CUNNINGHAM.

PRUNE SCALDING AND RINSING MACHINE.

No. 464,631. Patented Dec. 8, 1891.

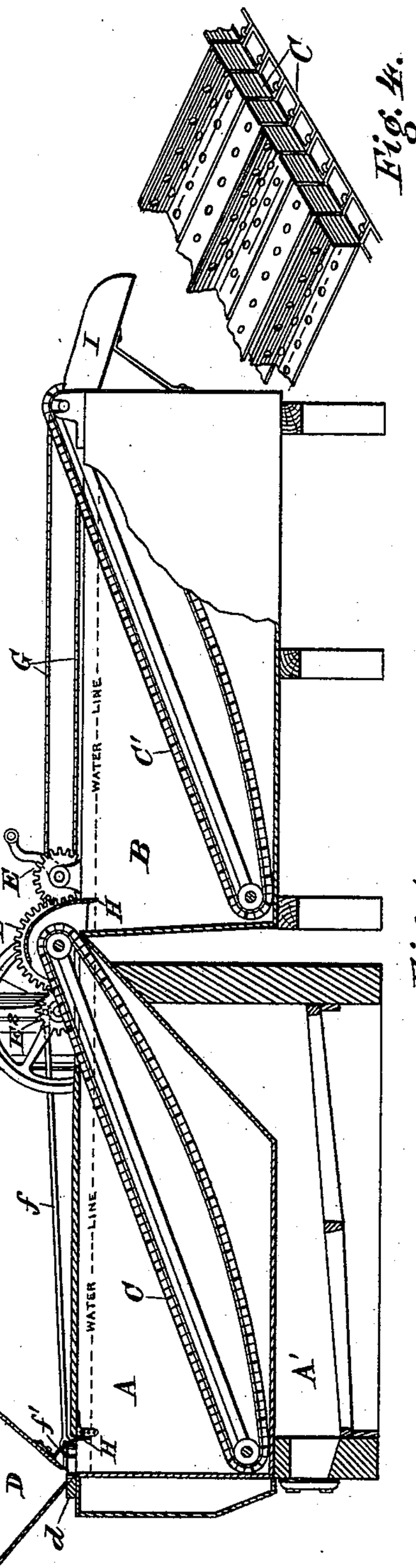

Fig. 1.

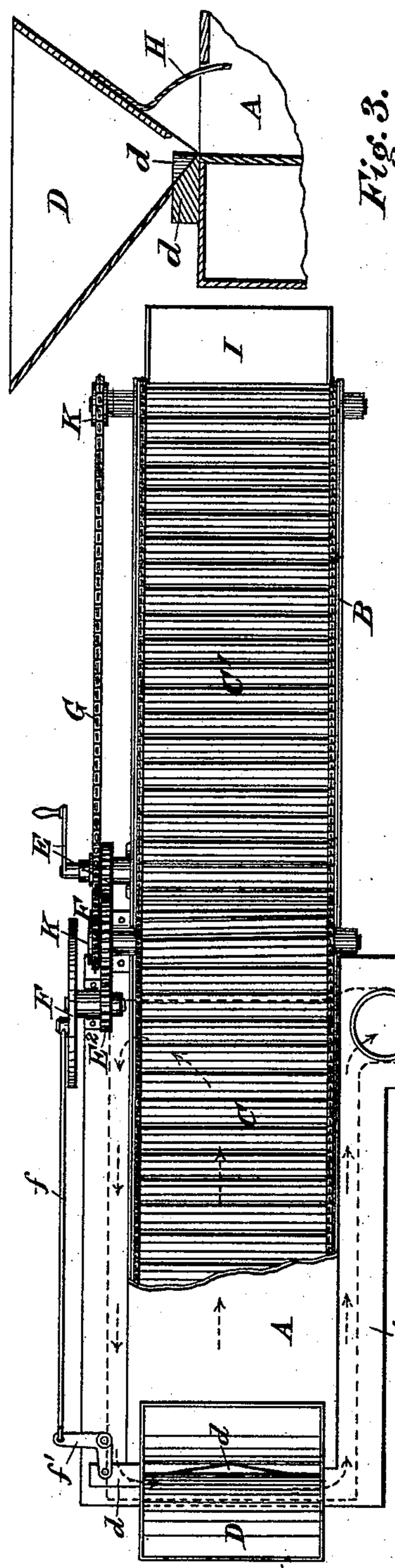

Fig. 2.

Fig. 3.

Fig. 4.

Witnesses:
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Inventor.
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By his Atty. W. H. Smyth

UNITED STATES PATENT OFFICE.

LUTHER CUNNINGHAM, OF SARATOGA, CALIFORNIA.

PRUNE SCALDING AND RINSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 464,631, dated December 8, 1891.

Application filed October 3, 1889. Serial No. 325,889. (No model.)

To all whom it may concern:

Be it known that I, LUTHER CUNNINGHAM, a citizen of the United States, residing at Saratoga, in the county of Santa Clara and State of California, have invented a new and useful Prune-Scalding and Rinsing Machine, of which the following is a specification.

My invention consists, essentially, of one or more traveling carriers, a bath or baths of water through which the carrier conducts the fruit, suitable means for heating the water, and other details of construction which will be more fully described hereinafter.

The object of my invention is to provide a machine for scalding and rinsing prunes during the course of their preparation, simple in construction and continuous and efficient in operation. I atttain these objects by means of the devices illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation. Fig. 2 is a plan view. Fig. 3 is a detail of feed-hopper; Fig. 4, a perspective view of portion of chain carrier.

Referring to the drawings, A is the scalding-tank. A′ is the furnace; B, washing or rinsing tank; C, chain carrier in scalding-tank; C′, chain carrier in rinsing-tank; D, feed-hopper; *d*, shaking-feeder; E, power device; E′, pinion; E²; gear; F, shaking-feeder-operating crank; *f*, shaking-feeder-connecting rod; *f*′, shaking-feeder bell-crank; G, driving-chain; H H, splash-boards; I, discharge-chute; K, sprocket-wheels.

The construction of my device is as follows: Two tanks A and B, containing water, are provided, preferably contiguous, one of which is provided with a furnace or other suitable device for heating the water. The hot-water tank is provided with an inclined conveyer or carrier C, the lower end of which commences at the front end of the tank. It extends beyond the rear end and projects over the front end of the cold-water tank B. The cold-water tank is provided with a similar inclined conveyer or carrier C′, the lower end of which commences at the front end of the tank directly below the rear end of the carrier C. The rear end of the carrier C′ projects over the rear end of the rinsing-tank and is provided with a suitable discharge-chute. Each of these conveyers consists, preferably, of two chains connected together by slats of suitable character for supporting and conveying the fruit. The chains pass around chain or sprocket wheels on shafts at each end of each conveyer.

Driving mechanism is provided for driving the conveyer, consisting of crank E, gear-pinion E′, and gear E², secured on the shaft of conveyer C, a chain or belt G, and sprocket or other pulleys K being also provided on the end of the conveyer-shafts, which are connected and driven by chain or belt G.

A feed-hopper D is placed at the front end of the scalding-tank over the lower end of the conveyer, this hopper being provided with a shaking device *d* to prevent the clogging of the feed-aperture. This device is operated from the crank F through the connecting-rod *f* and bell-crank *f*′.

The operation of my device is as follows: The water in the first tank A having been heated to the desired temperature by means of the fire in the furnace A′ or other suitable means, the fruit to be operated upon is dumped into the hopper D, from which it is fed in a continuous stream by means of the shaking-feeder *d* into the hot water in the tank. It immediately falls upon the moving carrier C, which conveys it up through the water and discharges it into the rinsing-tank B, through which it is conveyed by the conveyer C′ to the discharge-chute.

Prior to my invention of this machine the scalding and rinsing of prunes have been effected by being immersed in bulk in a vessel of hot water and then removed and rinsed in a vessel of cold water, the operation being very inconvenient and requiring much labor and time, and the result being highly unsatisfactory, as the fruit is unevenly scalded, those on the outside being more thoroughly operated on than those near the center of the mass.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a prune scalding and rinsing machine, the combination of two water-vessels, one of which is provided with a heating device, and a fruit-conveyer suitably placed therein that conveys fruit into the second vessel, substantially as described.

2. In a prune scalding and rinsing machine,

the combination of two water-vessels, one of which is provided with a heating device, also a fruit-conveyer suitably placed that conveys fruit into the second vessel, and a second fruit-conveyer in the second vessel that receives the fruit and carries it through the second vessel and discharges it therefrom, substantially as described.

3. In a prune scalding and rinsing machine, the combination of two water-vessels, each provided with a fruit-conveyer, one provided with a heating device, and suitable power connections for operating the conveyers, substantially as described.

4. In a prune scalding and rinsing machine, the combination of the water-vessels A and B, the fruit-conveyers C and C′, the furnace A′ for heating water in vessel A, the power connections for driving the conveyers, consisting of the gears E and E′, the belt G, and pulleys K K, the feed-hopper D, with its reciprocating feeder *d* connected to the power device by the bell-crank *f′*, and connecting-rod *f*, and crank F, and pinion E^2, and the splash boards or aprons H H, and discharge-chute I, all arranged and operating substantially as described.

In witness whereof I have hereunto set my hand.

LUTHER CUNNINGHAM.

Witnesses:
GEO. W. UEFFINGER,
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