

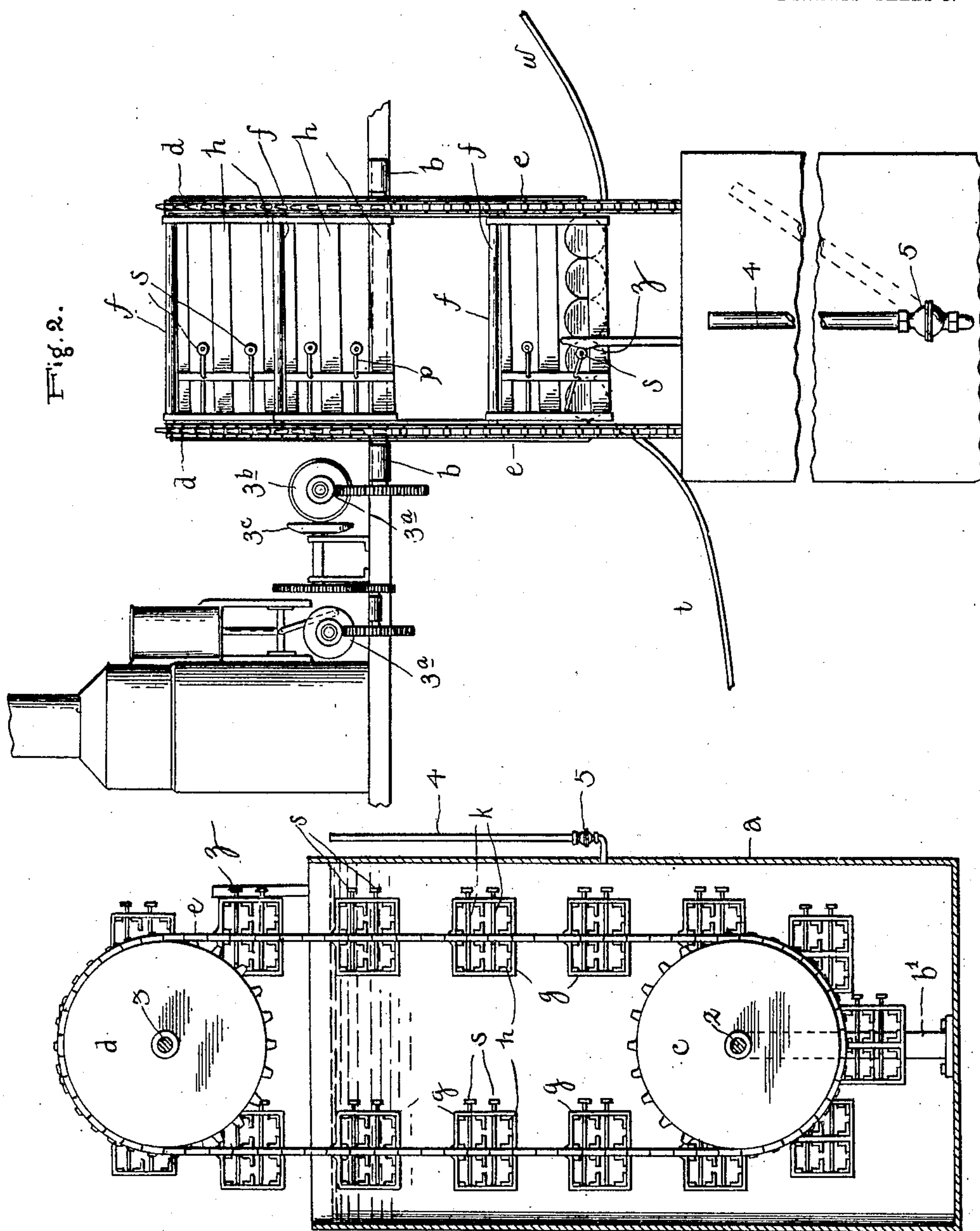
No. 876,660.

PATENTED JAN. 14, 1908.

J. P. RITCHIE.  
APPARATUS FOR COOKING CANNED GOODS.

APPLICATION FILED MAR. 12, 1907.

2 SHEETS—SHEET 1.



Inventor

Witnesses

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Fig. 1.

334

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2 SHEETS—SHEET 2.

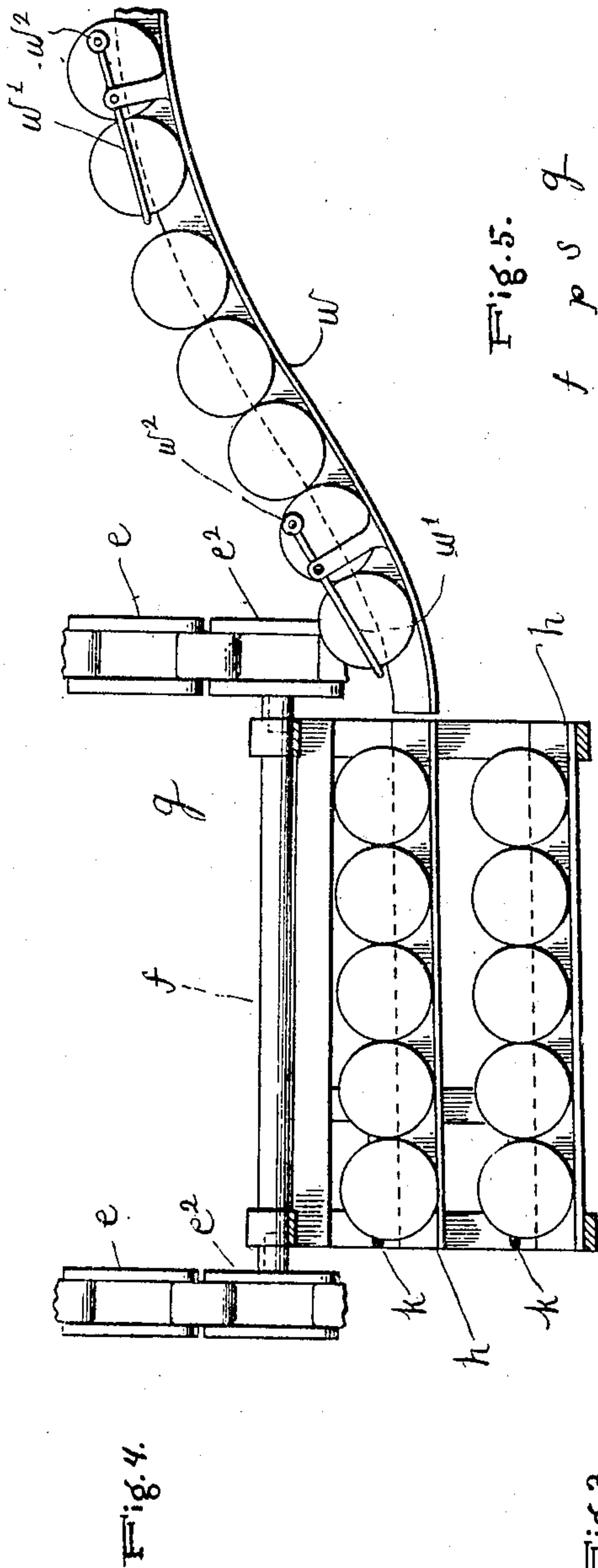


Fig. 4.

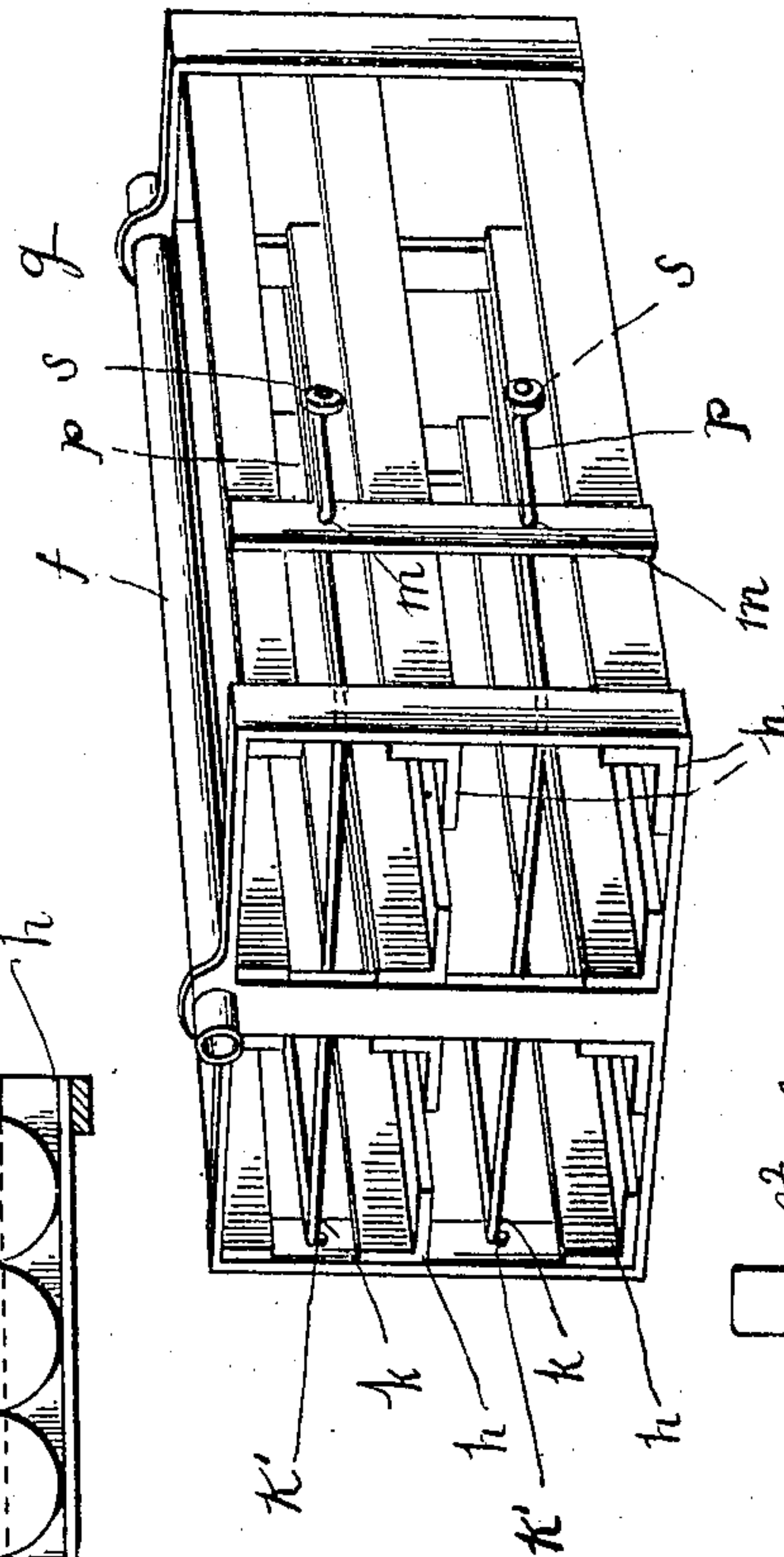


Fig. 5.

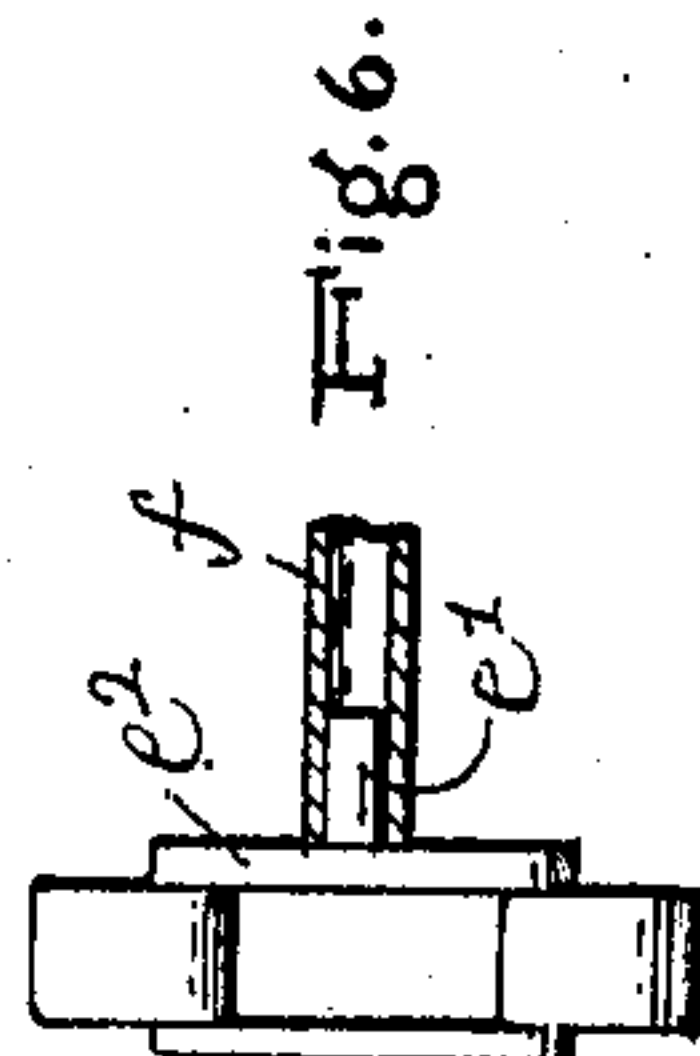


Fig. 6.

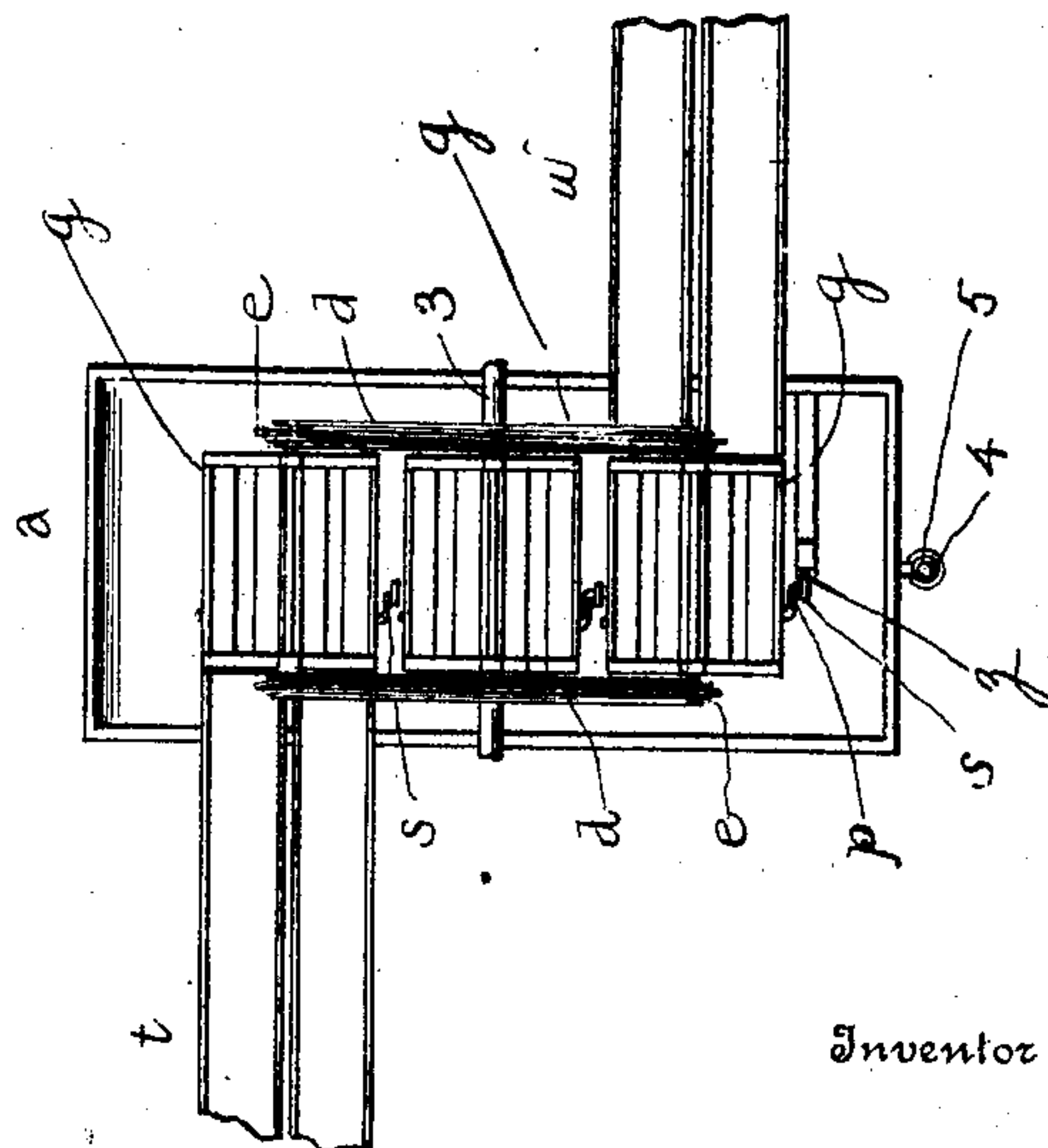


Fig. 3.

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# UNITED STATES PATENT OFFICE.

JAMES P. RITCHIE, OF NEW TAZEWELL, TENNESSEE.

## APPARATUS FOR COOKING CANNED GOODS.

No. 876,660.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed March 12, 1907. Serial No. 361,961.

*To all whom it may concern:*

Be it known that I, JAMES P. RITCHIE, a citizen of the United States, resident of New Tazewell, in the county of Claiborne and State of Tennessee, have made a certain new and useful Invention in Apparatus for Cooking Canned Goods; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The invention has relation to apparatus to be used for cooking canned goods with hot water, and it consists in the novel construction and combinations of devices, as hereinafter set forth.

The object of the invention is to provide means for facilitating the rapid handling of the cans in large numbers and in connection therewith means for exactly regulating the time during which the cans are in the water.

Other objects and advantages will hereinafter appear.

In the accompanying drawings illustrating the invention Figure 1 is a side elevation of the invention with the tank in section; Fig. 2 is an end elevation of the apparatus on a larger scale and partly broken away, showing the power or driving connection; Fig. 3 is a plan view of the invention; Fig. 4 is a detail-sectional view of one of the pivoted carriers, showing parts of the sprocket chains and the feed track; Fig. 5 is a detail perspective view of one of the pivoted carriers, and Fig. 6 is a fragmentary detail view, partly in section of one of the sprocket links and parts connected thereto.

In these drawings, the letter *a* designates a tank of proper size for the reception of the mechanism, which is designed to be partially immersed, to the points of feed and discharge, in the hot water of the tank.

The letters *b*, *b'*, indicate framework for support of the shaft 2 of the sprocket wheels *c* in the lower part of the tank, and the shaft 3 of the sprocket wheels *d* above the tank. Endless chains *e*, engage these sprocket wheels, which are designed to be connected with suitable power devices for turning the same. The opposite chains are connected at intervals by pipes or bars *f*, engaging at their end portions lateral tenons *e'*, of links *e''*, of the chains, such pipes serving to brace

the chains at proper distance apart, and to provide means for suspension of the baskets or carriers *g*, in which the cans are carried through the hot water, first downward from the point of feeding, and then upward to the point of discharge.

The baskets *g* are suspended from the transverse pipes *f* by means of hooks, loops, or other pivotal bearings, so that they will always hang vertically downward throughout the movement of the endless chains. These baskets are constructed in elongated skeleton form, having longitudinal run-ways or angle shelves *h*, which are inclined slightly to the horizontal from the feed end toward the discharge end, and being designed to extend as nearly as possible the length of the tank, such space being governed by the position of the sprocket wheels and the feeding and discharge tracks. Each basket may be provided with several run-ways, according to the size of the tank, and the capacity desired.

At the discharge end of each run-way is provided an automatically working discharge gate *k*, which is hinged or fulcrumed as indicated at *m*, to the wall or other suitable bearings of the run-way or basket. It is designed to be of bail form, and is provided with an arm *p*, which extends rearward and is provided with an anti-friction roller *s*. As the gate falls by gravity in front of the line or charge of cans on a run-way, it serves to hold them in place, until the run-way rises out of the hot water at the discharge side of the tank, pins *k'* serving to support the gate in normal position. At this point, the anti-friction roller of the gate arm comes in contact with the cam surface *z* of an upright post, which serves to raise the gate and hold it open long enough to allow the cans to roll off the inclined run-way onto the discharge track *t*. At the opposite side of the tank is provided the feed track *w*, whereon the cans are arranged in a row or rows, preferably in groups of five, as shown, held in check by a pivoted gate *w'*, having a handle *w''*, whereby when the gate is lifted the cans will roll into the aligned basket as it comes over from the discharge point.

The upper sprocket wheel shaft 3, has power connection provided with worm gear *3<sup>a</sup>*, for reducing the speed movement of the chain and baskets to the point desired, such speed being governed by adjustment of the friction disk *3<sup>b</sup>*, with relation to the disk



3°, in contact therewith, it being designed to run the chains and baskets at a speed of about four inches per minute. This movement is slow enough to allow a rapid feed of the cans to be subjected to the cooking process without stopping the motion of the chains.

The time during which the cans are immersed in the water can be regulated by suitable adjustment of the friction gearing above referred to, and is also capable of regulation by means of an adjustable waste pipe in the tank, as indicated at 4, this waste pipe having a ball joint as shown at 5, in such wise that its mouth may be adjusted to different levels, at the same time regulating the level of the water in the tank.

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

1. In apparatus of the class described, the combination of a tank, sprocket mechanism having opposite endless upright chains, transverse carriers hung from said chains, said carriers having run-ways inclined slightly to the horizontal, a gate normally closing the lower end of the run-way of each said carrier, and means for automatically operating said gate to discharge the cans.

2. In apparatus of the class described, the combination of a tank, sprocket mechanism having opposite endless upright chains, transverse carriers hung from said chains, said carriers having run-ways inclined slightly to the horizontal, a feed track lead-

ing to one of said carriers, a discharge track leading from the opposite ends of the carriers, and means for automatically discharging the cans from the carriers, including a gate normally closing the lower end of each runway.

3. In apparatus of the class described, a tank, opposite upper and lower pairs of sprocket wheels, opposite endless chains connecting said sprocket wheels, transverse bars connecting links of opposite chains, pivoted transverse carriers hung from said bars and having each a run-way inclined slightly to the horizontal, a gate normally closing the lower end of each run-way, and means for automatically operating said gate to discharge the cans.

4. In apparatus of the class described, the combination of a tank, sprocket mechanism having opposite endless upright chains, transverse carriers hung from such chains, said carriers having run-ways inclined slightly to the horizontal, a gate normally closing the lower end of each run-way, said gate having an arm extension carrying an anti-friction roller, and cam means adapted to engage such roller for automatically operating said gate to discharge the cans.

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

JAMES P. RITCHIE.

Witnesses:

A. B. RITCHIE,

CURRY L. GRABEEL.