(No Model.)

A. CERRUTI.

CAN FILLING APPARATUS.

No. 341,996. Patented May 18, 1886.

Fig 1.

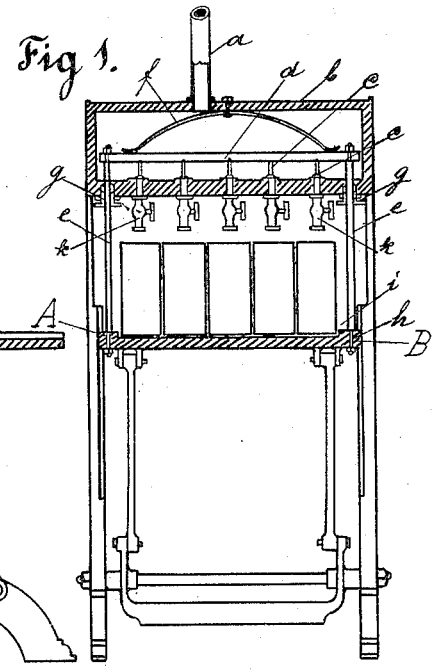


Fig 2.

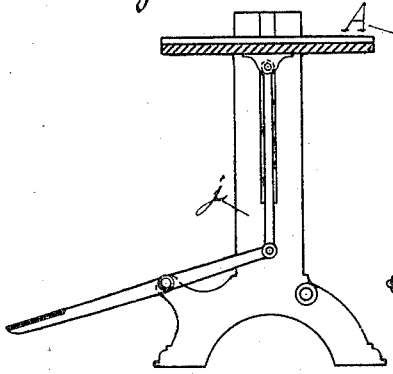


Fig 3.

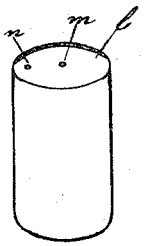
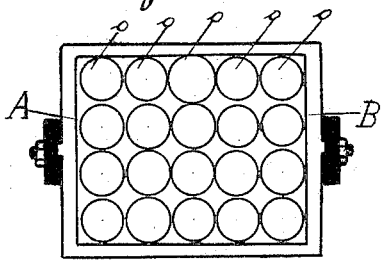


Fig 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

ANTONIO CERRUTI, OF SAN FRANCISCO, CALIFORNIA.

CAN-FILLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 341,996, dated May 18, 1886.

Application filed October 10, 1885. Serial No. 179,480. (No model.)

To all whom it may concern:

Be it known that I, ANTONIO CERRUTI, a resident of San Francisco, State of California, have invented a new and useful device which I call a Can-Filler; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings.

My invention relates to a device for the rapid filling of cans containing fruits, vegetables, or other material with sirup or other fluid by hydrostatic pressure.

The following description fully explains the nature of my said invention and the manner in which I proceed to construct, apply, and operate the same, the accompanying drawings being referred to by figures and letters.

Figure 1 represents the elevation of the apparatus. Fig. 2 represents a side elevation of the table, showing the lever for lifting the same. Fig. 3 is a perspective view of the can, showing the holes, one for the inlet of the fluid and the other the air-vent. Fig. 4 represents a plan-section through A B, showing the tray with a battery of cans supported on the table.

In Fig. 1, *a* is the pipe for receiving the fluid; *b*, tank containing the fluid; *c*, valves for letting the fluid flow from the tank; *d*, cross-bars to which the valves are attached; *e*, rods for operating cross-bars; *f*, half-elliptic spring for closing the valves; *g*, stuffing-boxes attached to rods; *h*, movable table; *i*, tray with battery of cans, and *k* faucets for discharging the fluid into the cans.

In Fig. 2, *j* is the table-frame with lever and treadle for lifting the table.

In Fig. 3, *l* is the can, *m* hole in same for inlet of fluid, and *n* air-vent.

In Fig. 4, *o* is the battery of cans.

My device consists of an upright frame of wood or metal, projecting from the top of which is a pipe, *a*, for receiving sirup or fluid from a reservoir overhead and conducting it to the tank *b*, placed at the top of the frame.

Extending from the center to the bottom of the frame is a table, *h*, for holding a tray, *i*, containing the battery of cans *o*, and connected with the lower part of the table-frame *j* is a treadle suspended from levers, by which the table is lifted in a groove in the frame.

Placed in the tank, and bolted to its upper part, are half-elliptic springs *f*, the ends of which are attached to the cross-bars *d*, and to these cross-bars the valves *c* are attached. Upright rods *e* are bolted to the cross-bars and the movable table, and each rod is provided with a stuffing-box, *g*, to prevent the fluid from escaping by the rods.

Faucets *k* are inserted in the bottom of the tank, the shank fitting against the valves, and the discharge opening or mouth is provided with a rubber ring, which fits closely around the central hole, *m*, in the cover of the can, Figs. 1, 3. The faucets may be made with the mouth or discharge tapering to a point to enter the small hole *m* in the can.

The arrangement described is for the operation of a battery of twenty-five cans composed of five rows. Each row of cans has its corresponding faucets, valves, cross-bar, upright rods, and spring, as the action of each is required in the operation of filling a row of cans.

The operation of my device is as follows: The fluid, sirup, or vegetable matter contained in a reservoir situated at the proper height to give the required pressure is received by the pipe *a* and discharged into the tank *b*. The battery of cans to be filled is placed on the tray, and the tray is placed on the table, which is down. The operator sets his foot upon the treadle, by which action the table is lifted, and the upright rods *e*, which are bolted to the table, raise the cross-bar *d* against the spring *f*, releasing its pressure upon the valves *c*, which open and permit the fluid to flow from the tank into the faucets *k*, and thence into the can through the hole *m*, the air in the can escaping at the same time through the vent-hole *n*, Fig. 1. When a battery of cans has been filled, the table is lowered by the treadle, when the spring closes the valves, and the flow of the fluid stops. As the rods *e* pass into the tank, the stuffing-boxes *g* prevent the flow of the fluid down their surface.

By the use of my device the cans may be filled with great rapidity. It is especially adapted to the business of canning fruits and vegetables and other material. The inlet in the can which I employ with my device is about the diameter of a pin, and through this aperture the can under pressure is filled in several seconds. The can is first filled with fruit or vegetable mat-

ter, and then the cover, perforated with these pin-holes, is soldered on, by which means the contents of the can are in better form than if put in through the opening in the cover of the can, according to the method in vogue. The opening in the common can has to be capped with a large piece of tin and soldered, whereas with the can I employ a touch of the soldering-iron suffices to seal the small holes.

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

1. In a can-filling machine, the combination, with the movable table *h* and means, substantially as described, for vertically reciprocating it, of the tank *b*, having the cocks *k* and supply-pipe *a*, and the spring-yoke or cross-bar *d*, connected to table *h* and to valves of cocks *k*, as shown, and for the purpose set forth.

2. In a can-filler, the combination of the pipe *a*, tank *b*, valves *c*, cross-bars *d*, upright rods *e*, half-elliptic spring *f*, stuffing-boxes *g*, movable table *h*, tray *i* for battery of cans, table-frame *j* with treadle and lever, faucets *k*, and cans *l*, having inlet-hole *m* and vent-hole *n*, substantially as described, and for the purpose set forth.

In testimony whereof I have hereunto set my hand and seal.

ANTONIO CERRUTI. [L. S.]

Witnesses:
A. B. SMITH,
FERDINAND IMHORST.