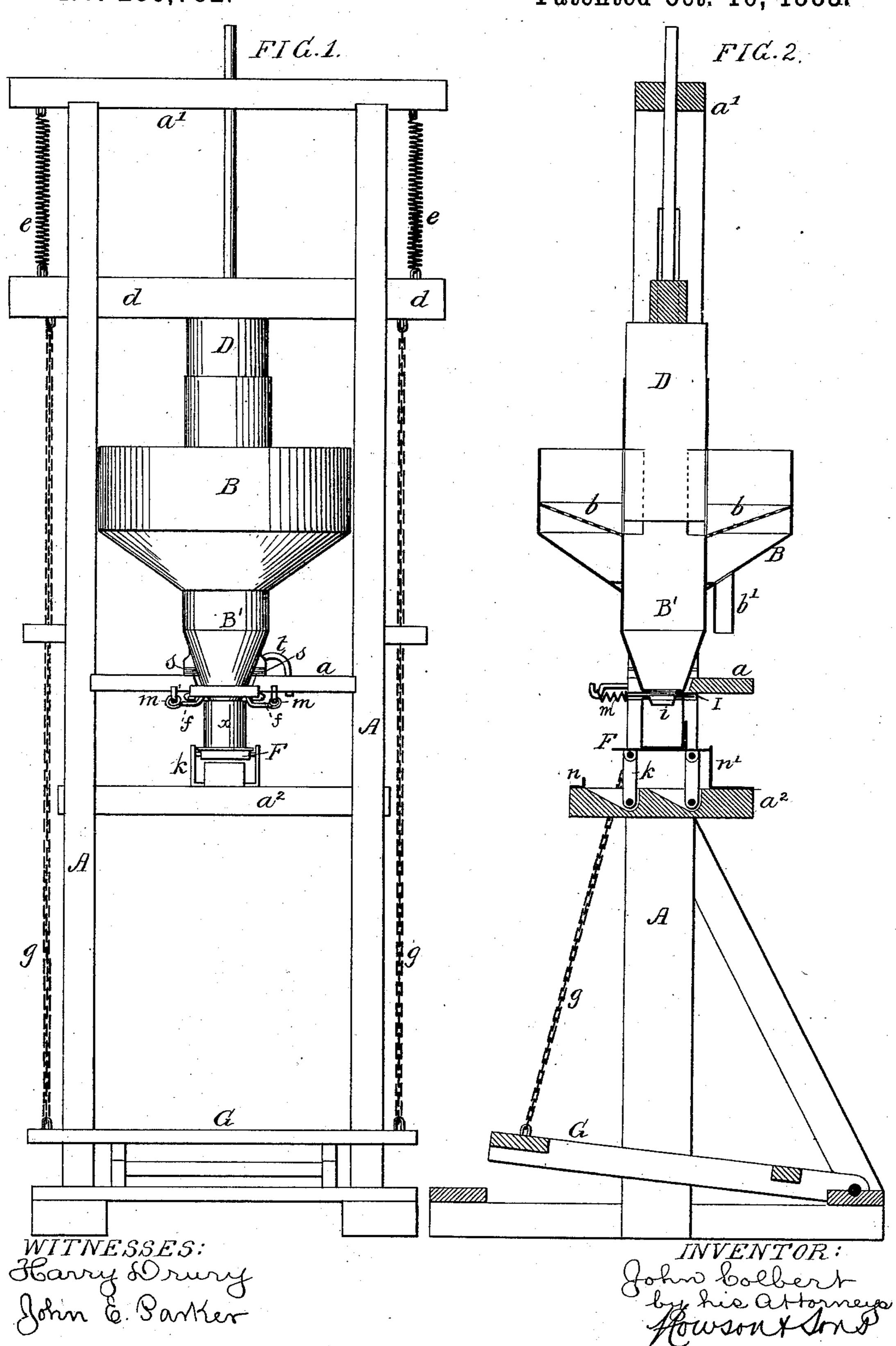
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No. 286,782.

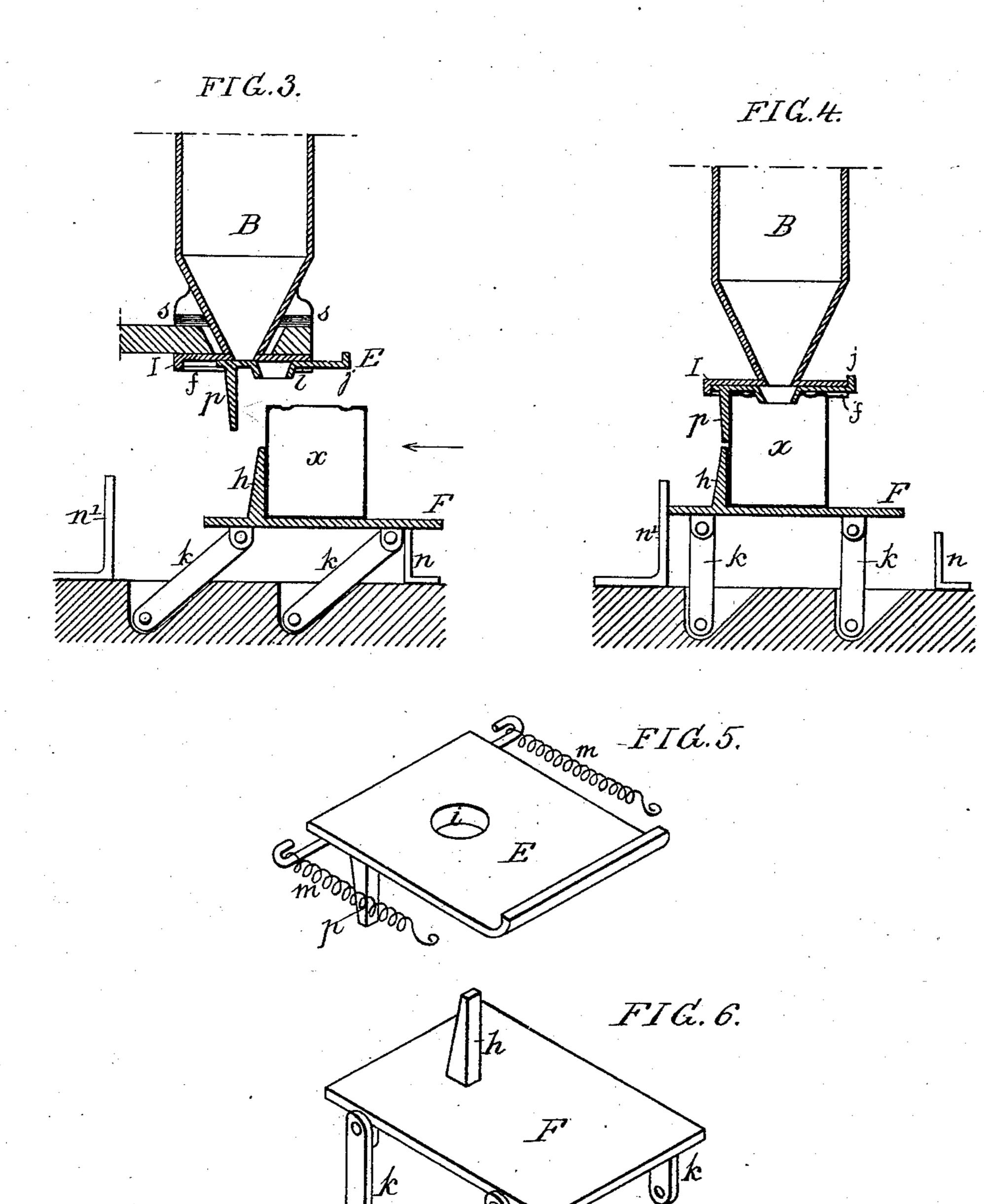
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WITNESSES: Harry Drury John E. Banker

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United States Patent Offices

JOHN COLBERT, OF MANTUA, NEW JERSEY.

CAN-FILLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 286,782, dated October 16, 1883.

Application filed August 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, John Colbert, a citizen of the United States, and a resident of Mantua, Gloucester county, New Jersey, have invented certain Improvements in Can-Filling Machines, of which the following is a specification.

The object of my invention is to so construct the can-carrier and valve of a can-filling machine that the can may be readily applied to the filling-spout, and a tight joint insured between the top of the can and the valve. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1, Sheet 1, is a front view of the machine with my improvements; Fig. 2, a longitudinal section of the same; Figs. 3 and 4, Sheet 2, enlarged sectional views of parts of the machine, and Figs. 5 and 6 perspective

views of the valve and can-carrier.

A represents the frame of the machine, having cross-bars a, a', and a^2 . The bar a supports the hopper B and filling-spout B', the 15 hopper having a strainer-plate, b, for separating the juice from the solid portions of the tomatoes or other vegetables, or of the fruit which is to be packed, the juice passing off through a pipe, b', to any suitable receptacle.

To the filling-spout is fitted the plunger D, which is secured to a cross-head, d, guided in the frame A, the outer ends of said cross-head being connected by chains g to a treadle, 35 G, and being also acted upon by springs e, which tend to raise the cross-head and plunger when pressure is removed from the treadle.

To guides f on a valve-box, I, secured to the spout B', are adapted the edges of a valve, 40 E, which is free to slide in said guides, springs m tending to retract the valve, so as to close the opening in the filling-spout, and the valve being moved inward, so as to bring its opening i in line with that of the filling-spout when 45 the can is to be filled.

The can rests upon a table, F, which is hung by means of links k to the cross-bar a^2 of the frame, and the movement of the table is limited by stops n n' on the bar. On the table is a

gage, h, and on the valve E is a projecting 50 finger, p, the outer end of the valve having a flange, j, which limits the inward movement of said valve by contact with the end of the valve-box.

The operation is as follows: A can, x, be- 55 ing placed on the table F and against the gage h, is pressed inward, as shown by the arrow in Fig. 3. Owing to the links k, this movement causes the table to rise, so as to apply the mouth of the can to the flanged 60 opening i of the valve E, the said valve being moved inward by contact of the can with the finger p, so as to cause the opening i to coincide with the mouth of the filling-spout, and thus permit the tomatoes to be forced into 65 the can on the descent of the plunger D, the links k being in the vertical position shown in Fig. 4, so as to effectually resist the downward pressure. On retracting the filled can the valve will be drawn out by the springs m, 70 so as to close the mouth of the spout, the can falling with the table F, so as to clear the valve and permit its removal and the application of an empty can. Between the bar a'and the supporting-lugs on the spout B' are 75 interposed blocks s, of rubber, or other suitable springs, so that the spout will be at liberty to yield slightly in a vertical direction when subjected to pressure caused by a sudden descent of the plunger D, there being suf- 80 ficient play between the valve and can to permit this slight movement.

The usual vent-tube, t, is provided for the escape of the air from the can as it is being filled and for the discharge of the surplus 85

Although I prefer to actuate the valve E by the can as the latter is moved into position, the valve may be otherwise arranged, and may be operated independently of the 90

can, the latter being applied directly to the mouth of the filling-spout.

I claim as my invention—
1. The combination of the filling-spout, the can-holding plate, the supporting-bar, and a 95 link-connection between said plate and the bar, as set forth.

2. The combination of the filling-spout, the

sliding valve E, the can-holding plate, the supporting-bar, the link-connection between said plate and bar, and means, substantially as described, whereby the valve is opened and closed simultaneously with the movement of the can into and out of position, as set forth.

3. The combination of the filling-spout B', and supporting-bar a' with the elastic medium s, interposed between the two, as set forth.

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

JOHN COLBERT.

Witnesses:

HARRY L. ASHENFELTER, HARRY SMITH.