

No. 765,184.

PATENTED JULY 19, 1904.

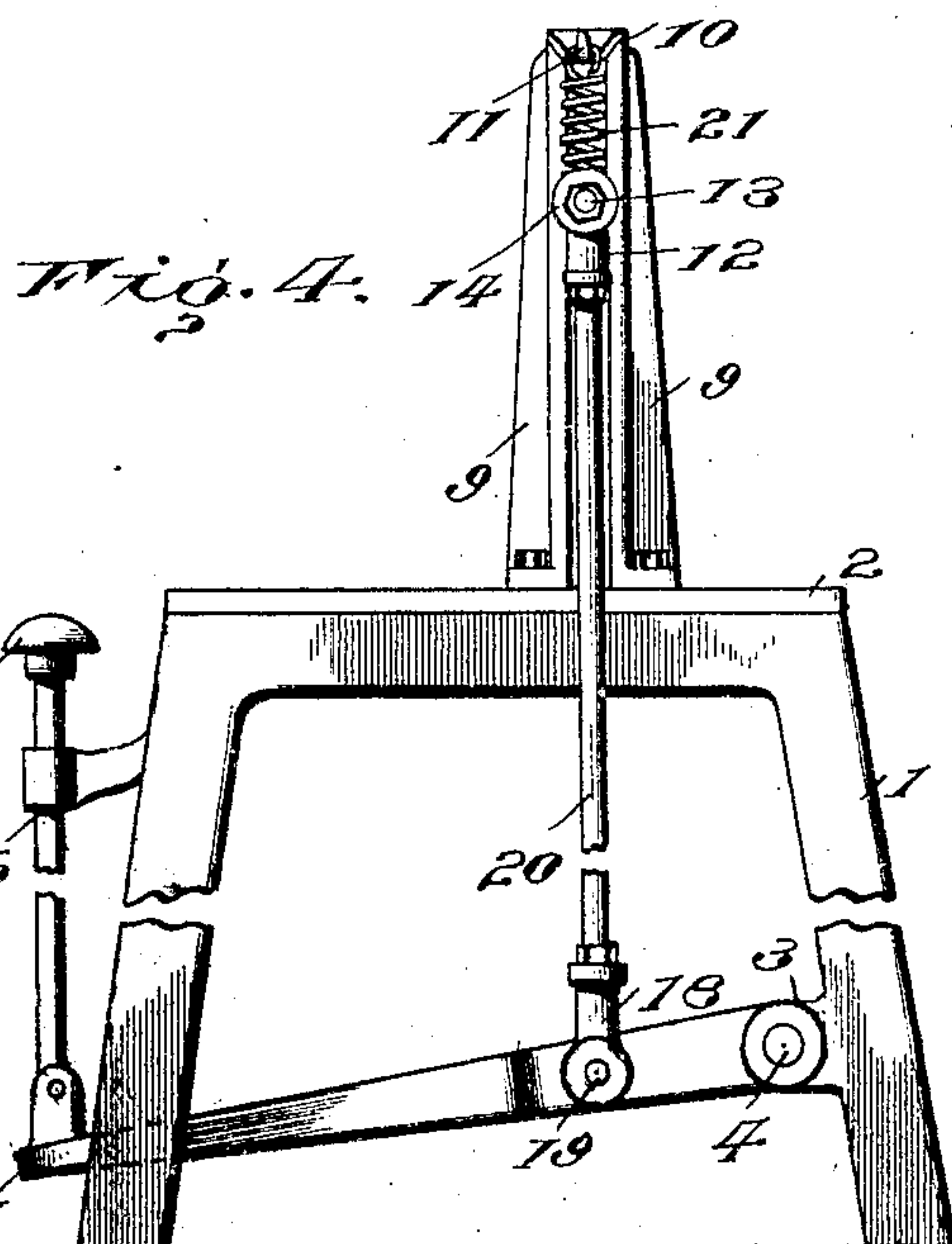
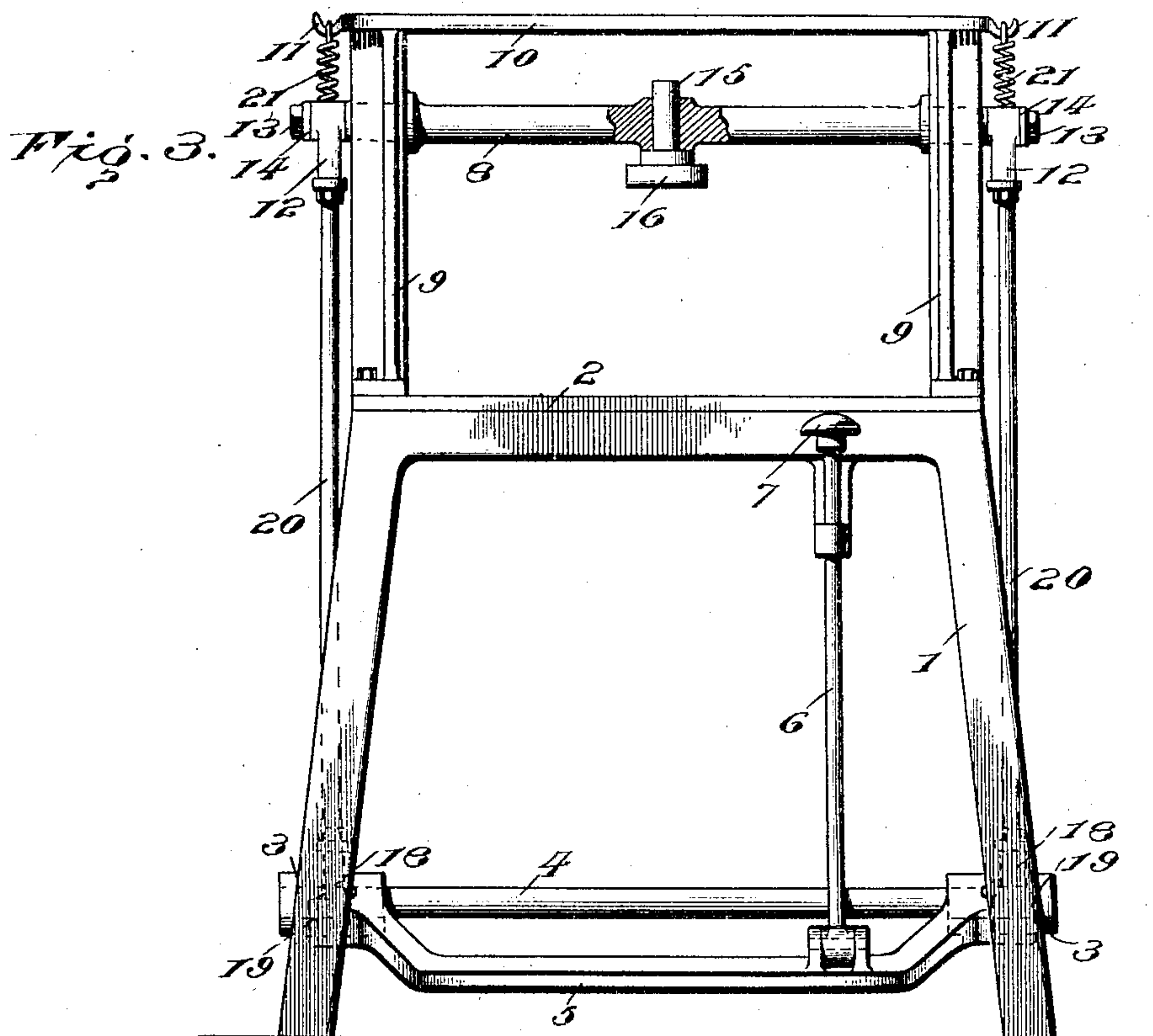
J. F. KURFEES.

MACHINE FOR CLOSING FRICTION TOP CANS.

APPLICATION FILED NOV. 2, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



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JAMES F. KURFEES, OF LOUISVILLE, KENTUCKY.

MACHINE FOR CLOSING FRICTION-TOP CANS.

SPECIFICATION forming part of Letters Patent No. 765,184, dated July 19, 1904.

Application filed November 2, 1903. Serial No. 179,557. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. KURFEES, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Machines for Closing Friction-Top Cans, of which the following is a specification.

This invention has for its object to facilitate the closing of cans and like packages sealed by means of friction-tops and to reduce the labor incident to this character of work and to enable the operator to materially increase the output, with the result that the cost of closing packages of the character aforesaid is greatly diminished.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a machine specially designed for attaining the objects of this invention. Fig. 2 is a top plan view thereof, a portion of the cross-beam being broken away. Fig. 3 is a front view of the machine, a portion of the cross-head being broken away. Fig. 4 is a side view of the machine, parts being broken away.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The framework for supporting the operating parts consists, essentially, of a stand comprising legs 1 and table 2, said legs being connected at their upper ends in any substantial manner. Lugs 3 project inward from the rear legs and are transversely apertured to receive the ends of the rod or bar 4, upon which the treadle 5 is loosely mounted.

The treadle may be of any construction, and, as shown, consists of an approximately U-shaped frame, the side bars of which are pro-

vided at their rear ends with sleeves to receive the rod 4, upon which the treadle works. While it is primarily intended to operate the machine by foot-power, yet it may be advantageous at times to operate the same by hand, and for this purpose a rod or bar 6 is connected at its lower end to the treadle and projects upward and terminates in a knob 7, adapted to receive the pressure of the hand when operating the machine in this manner.

The cross-head 8 may be of any structural form and is directed in its vertical movements by suitable guides secured to the table and projected vertically therefrom. The guides consist of spaced standards 9, bolted or otherwise firmly attached at their lower ends to the stand and connected at their upper ends by means of the cross-bar 10, provided at its extremities with hooks 11. Each of the guides consists of a pair of standards, which receive between them the reduced ends of the cross-head and which ends project beyond the guides to receive couplings 12, the securing-nut 13, and washers 14 at each side of the sleeve or head of the couplings. The central portion of the cross-head is vertically apertured and reinforced with bosses and receives the stem 15 of the die 16, which is of a size to loosely fit within the tops or closures of the cans or packages. A clamp-screw 17 is threaded into a side of the cross-head and is adapted to engage at its inner end with the stem 15 to hold the die 16 in place. This construction admits of dies of different sizes being placed in position according to the size of the top or closure to be operated upon. The end portions of the cross-head at the base of the reduced terminal portions are extended vertically, so as to obtain a firm bearing against the inner sides of the guides, thereby preventing any binding of the cross-head in the operation of the machine.

Couplings or fittings 18, similar in construction to the couplings or fittings 12, are journaled upon pins or studs 19, projected laterally from the side bars of the treadle, and rods 20 connect the couplings or fittings 12 and 18, so as to transmit movement from the treadle to the cross-head. The couplings or fittings are approximately of T form, their

vertical branches being threaded to receive the threaded ends of the connecting-rods 20. One end of the connecting-rods is provided with a right-hand thread and the opposite end
5 with a left-hand thread to match corresponding threads of the respective couplings 12 and 18, whereby a turning of the connecting-rods results in vertical adjustment of the cross-head to suit cans or packages of different
10 heights. Springs 21 connect the end portions of the cross-head with corresponding ends of the cross-beam 10, said springs being attached at their lower ends to the couplings 12 and at their upper ends to the hooks 11.

15 The cans or packages to be closed after being filled are placed upon the table 2 in proper position so that the tops are in vertical alinement with the die 16, and a downward movement of the treadle forces the tops into place.
20 To properly position the cans upon the table, pins 22 are provided and constitute adjustable stops, said pins being inserted into one of the series of openings 23, provided in the table and arranged at different distances from a
25 point in vertical alinement with the axis of the die 16.

Having thus described the invention, what is claimed as new is—

1. In a machine for closing friction-top cans,

the combination of a table provided with a series of openings at different distances from a
30 given point, stops adapted to be inserted into selected openings of the series provided in the table for properly positioning the cans, guides
35 projected vertically from the table, a cross-head directed in its movements by the guides, a die detachably connected with said cross-head, a treadle, and means adjustably connecting said treadle with opposite ends of the cross-head, substantially as set forth. 40

2. In combination, a table provided with a series of openings at different distances from a given point, stops adapted to be inserted into
45 selected openings of the series aforesaid for properly positioning the cans, guides projected vertically from the table, a cross-beam connecting the upper ends of the guides, a cross-head directed in its vertical movements by means of said guides, springs connecting the
50 end portions of the cross-head with the terminal portions of said cross-beam, and a treadle connected with the said cross-head.

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

JAMES F. KURFEES. [L. s.]

Witnesses:

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ALBERT S. POPE.