

(No Model.)

2 Sheets—Sheet 1.

W. E. KNOLLENBERG & T. D. CRAWFORD.
PRESS FOR PACKING CIGAR CLIPPINGS.

No. 564,287.

Patented July 21, 1896.

Fig. 1.

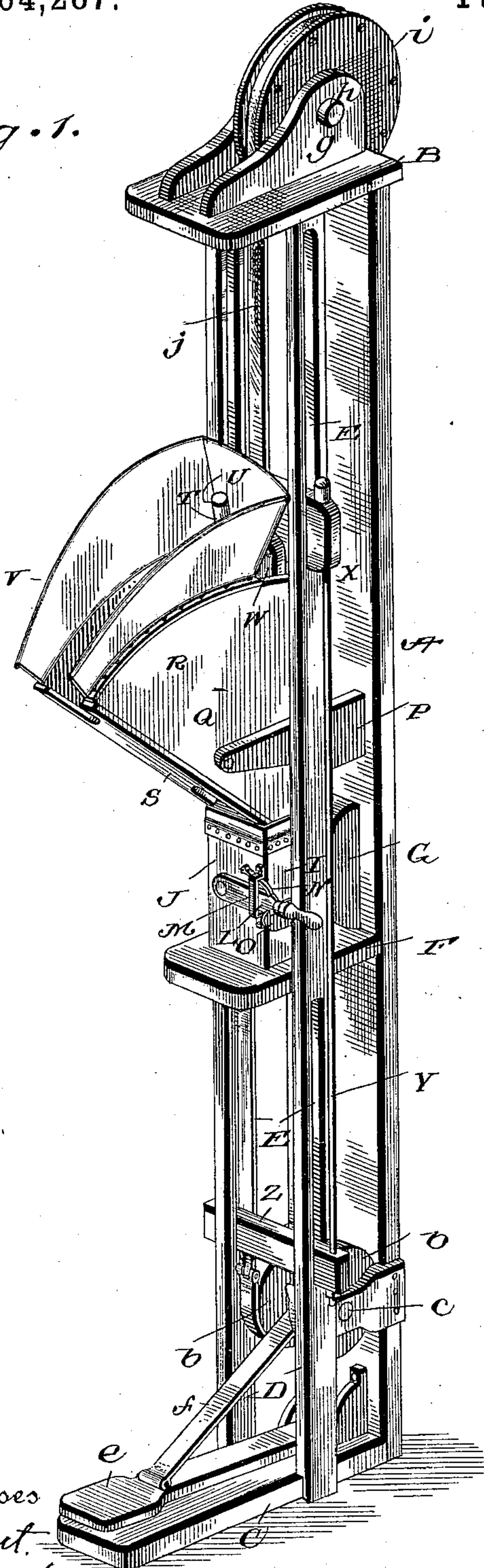
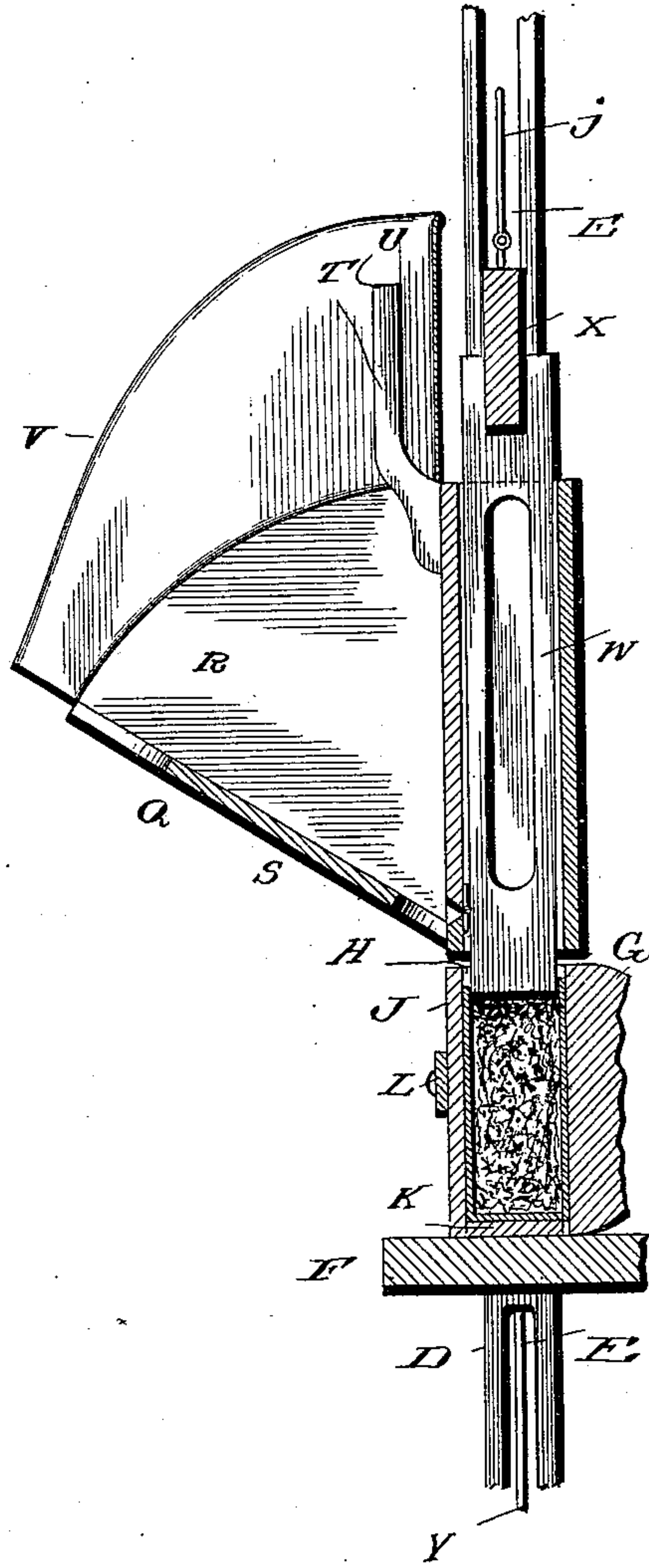


Fig. 4.



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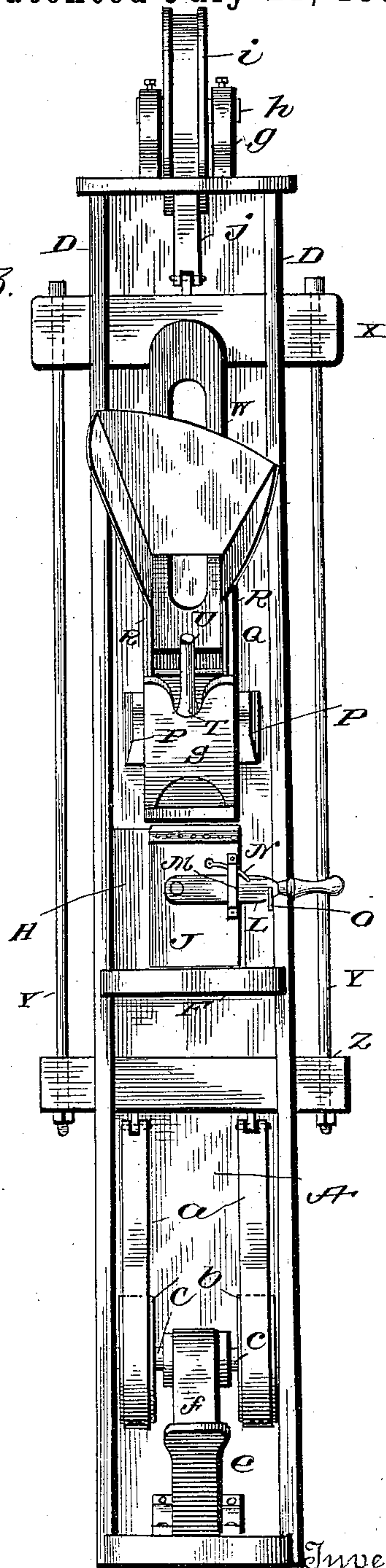
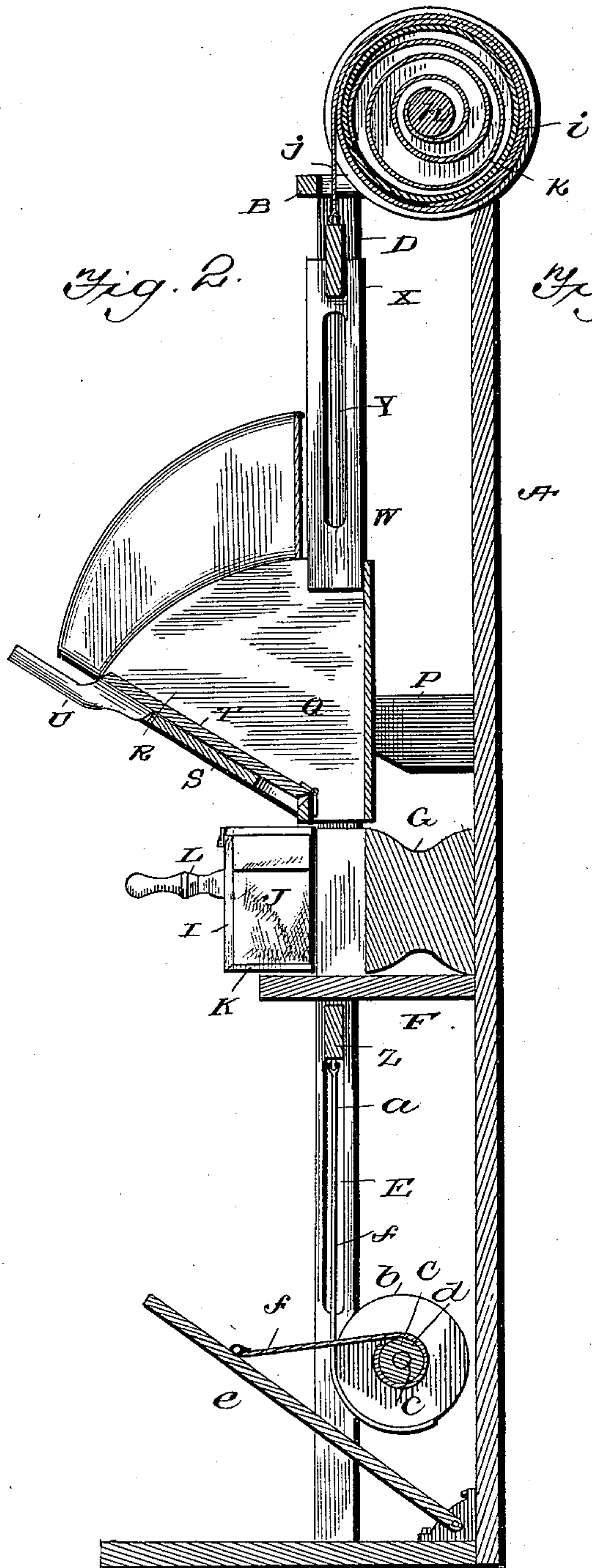
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2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

WILLIAM E. KNOLLENBERG AND THOMAS D. CRAWFORD, OF JACKSONVILLE,
ILLINOIS.

PRESS FOR PACKING CIGAR-CLIPPINGS.

SPECIFICATION forming part of Letters Patent No. 564,287, dated July 21, 1896.

Application filed April 4, 1896. Serial No. 586,234. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM E. KNOLLENBERG and THOMAS D. CRAWFORD, citizens of the United States, residing at Jacksonville, in the county of Morgan and State of Illinois, have invented certain new and useful Improvements in Machines for Packing Cigar-Clippings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention is a machine for filling boxes or packages with the clippings from cigars and loose scraps of tobacco; and it consists in certain novel features hereinafter described and claimed.

In the drawings annexed, Figure 1 is a perspective view of our complete machine. Fig. 2 is a vertical sectional view of the same with the package-holder open and an unfilled package in position therein. Fig. 3 is a front elevation, the plunger being partly depressed in order to more clearly show the arrangement of the parts. Fig. 4 is a vertical section of the machine, showing the plunger depressed to fill the package.

In carrying out our invention we employ a standard or main support A, to the upper end of which we secure a cap-plate B, and to the lower end of which we secure a forwardly-projecting base-plate C. Extending between the cap-plate and the base-plate are a pair of posts D, in which are formed the vertical longitudinal slots E, hereinafter more fully referred to. At an intermediate point of the standard and posts we secure thereto a shelf F, and just above this shelf we secure a forwardly-projecting block G, which serves as a back for the package-holder. To one of the posts we secure a similar block H, which forms one side of the package-holder. The remaining side I and front J of the holder are formed in a separate structure and are hinged to the block H to constitute a swinging member of the package-holder. This swinging member

is provided with a base K, which supports the package and rests on the shelf F, as clearly shown in Fig. 2. On the front of the package-holder we pivot a latch L, which plays in a keeper M and is pressed normally downward by a spring N, secured to the holder and engaging a notch in the upper edge of the latch. When the holder is closed, the latch is held by the spring in engagement with a hooked catch O, projecting forward from one of the posts D.

Above the block G we secure to the main support the forwardly-projecting arms P, to and between the front ends of which we secure a hopper Q, having forwardly-projecting triangular sides R, between the front edges of which we secure a downwardly and inwardly inclined rest or stop S for the swinging front or compressing lever T. This compressing-lever is fulcrumed at its lower end between the sides of the hopper, and is provided at its upper end with a handle U, by which it is operated. To the upper edges of the sides we secure a flaring guard or shield V, which prevents spilling and loss of the clippings as they are poured into the hopper, and the back of which serves as a guide for the plunger and a guard to prevent the operator's hand being struck by the plunger.

The plunger W consists of a block depending centrally from a cross-head X, which is mounted and slides in the upper slots E of the posts D. The ends of this cross-head project laterally beyond the posts D and are connected by the rods Y with a similar cross-head Z, mounted and sliding in the lower slots E. This lower cross-head is connected by straps *a* with pulleys *b*, secured on a rock-shaft *c*, secured to and between the main support and the posts D near the bottom of the same. At the center of this rock-shaft we secure a third and smaller pulley *d*, which is connected by a strap *f* with a treadle *e*, fulcrumed on the base-plate. On the upper side of the cap-plate we secure the standards or brackets *g*, in which we secure a rod *h*, and on said rod between the said brackets we mount a revoluble hollow drum *i*, which is connected with the upper cross-head by a strap

j. Within the drum is a volute spring *k*, having its opposite ends secured, respectively, to the drum and the rod *h*.

In operation the package to be filled is placed in the package-holder and the holder is then closed, thus bringing the package directly under the plunger and the mouth of the hopper. The clippings are gathered in a scale-pan and the desired weight of the same poured into the hopper. Most of the clippings will fall directly through the back and bottom of the hopper into the package, and those that remain in the hopper are discharged by swinging the compression-lever upward and backward to a vertical position. While the lever is held in this vertical position, the treadle is depressed, thereby bringing the plunger down so as to force all the clippings compactly into the package. Upon releasing the treadle the spring *k* at once returns the plunger to its highest normal position and the compression-lever is lowered. The filled package is removed and the operation then repeated until the required number of packages are filled.

It will be seen that we have provided a compactly-arranged machine by which the clippings can be rapidly made into marketable form without being granulated.

The construction illustrated is preferred,

but it will be readily understood that changes may be made in the details without departing from the principles of our invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination with the hopper and the package-holder below the same, of a plunger working through the hopper, a treadle below the hopper, a rock-shaft above the fulcrum of the treadle, belts connecting said shaft with the treadle near its free end, a sliding cross-head above the said rock-shaft and below the package-holder and connected with the rock-shaft by a belt, a sliding cross-head above the hopper, links connecting the cross-heads, a rotary drum mounted above the upper cross-head, a belt connecting the said cross-head and the drum, and a volute spring within the drum and having its ends secured respectively to the drum and the support of the same.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM E. KNOLLENBERG.
THOMAS D. CRAWFORD.

Witnesses:

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M. FOX.