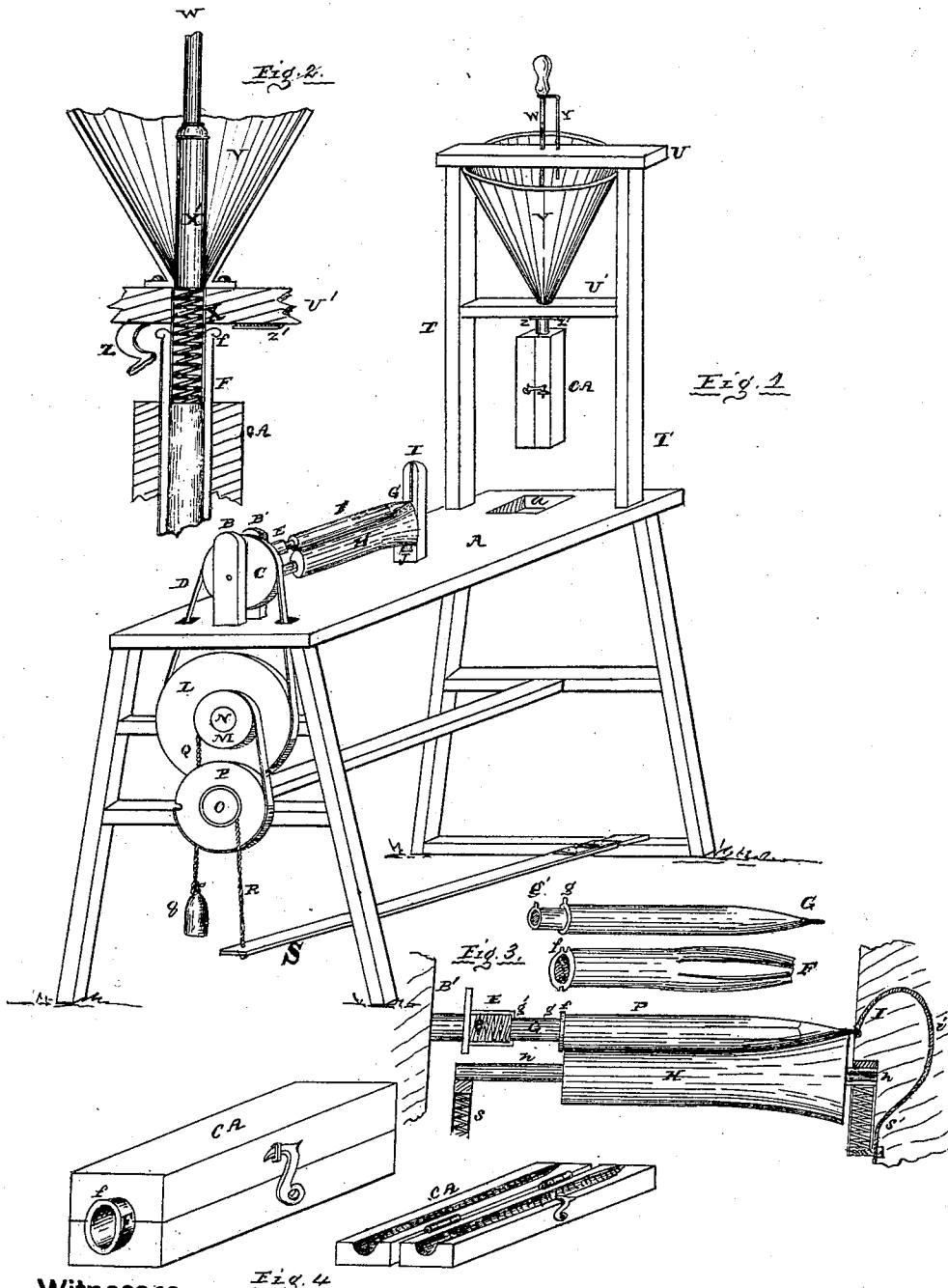


J. OCHS.

Improvement in Cigar-Machine.

No. 131,177.

Patented Sep. 10, 1872.



Witnesses.

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JESSE OCHS, OF LITIZ, PENNSYLVANIA.

IMPROVEMENT IN CIGAR-MACHINES.

Specification forming part of Letters Patent No. 131,177, dated September 10, 1872.

Specification describing a certain Process and Improved Devices in the Manufacture of Cigars, invented by JESSE OCHS, of Litiz, in the county of Lancaster and State of Pennsylvania.

The first part of my invention relates to the combination of the case and rollers for wrapping the wrappers and binders preparatory to incasing them in a mold for the purpose of filling said wrappers with fine offals, otherwise waste tobacco. The second part of my invention relates to a spring-tube and plunger within a funnel used for the reception of the finely-cut fragments, and uniformly packing the wrappers or outer shell of the cigar.

Figure 1 shows the table and gearing in perspective, with all the parts in place. Fig. 2 shows the spring in the tube of the funnel, and parts on an enlarged scale; Fig. 3, the follower and casing and parts detached, and manner of inserting the roller. Fig. 4 illustrates the hinged mold shut and open.

A brief explanation will enable others skilled in the art to make and use the same.

A represents an ordinary table, supporting on one end two uprights or posts, B B', with a belt-wheel, C, between them. There is also a similar post, I, for the bearings of the follower G and roller H, between said posts B and I. This follower G has the blunt end inserted against a coiled spring, e, within a sleeve, E, which sleeve is connected with the axle of the strap-wheel C. There is a thin metallic case, slit spring-fashion, F, slipped over the follower, and prevented from turning by a notch in the enlarged head f, and a pin, g, in the follower, which latter has also a pin, g', to secure its position in the sleeve E to prevent its turning. The other end of the follower has a steel point that slides down a groove in the bearing-plate, or may be held by a spring, i, inserted in the post I into a hole for its reception, it being pushed in by the action of the spring e on the blunt end inserted into the sleeve E aforesaid. There is a cloth-covered roller, H, to give the follower traction, inserted on spring-bearings s s' in the posts B' I, which embrace the casing F, and in contact with said casing, so as to revolve by friction in its movable bearings, resting on the coiled springs. The gearing I use consists of a hinged treadle, S, for the foot, connected with

a pulley, O, by a rope. Said pulley is on the same shaft with a larger pulley, P, having a notch or groove with a strap wound around the circumference, and attached to a smaller pulley, M, above it. On the same shaft is a drum, N, and large pulley L. This drum N has a cord, Q, wound upon it, attached to a weight, q. The large pulley L connects, by a strap, D, through the table, with the pulley C on the table, and with which the follower G is connected, so as to receive its motion by the alternate action of the treadle and weight in winding on and off. It is so arranged that the action may be reversed, or from right to left, as may be desired, by simply reversing one pulley. The other end of the table supports a frame, T U U'. There is a funnel-like hopper, V, supported between the top U and cross-piece U', with an elongated tube, X, passing through said cross-piece. Within this tube there is another tube, X', with a coiled spring and a circular end plate, made yielding. The tube is connected with a rod or plunger, W, for packing the finely-divided tobacco in the funnel V. This inner tube moves in close contact with the parallel sides of the funnel-tube. Beneath the cross-piece U' there is a clamp-lock, Z, and catch Z', for holding the case F within the mold-case C A, as shown.

The process or operation may be briefly stated. The prepared outer wrappers and binders being at hand, and also the tips, if wanted, one end is inserted between the follower and roller G H. A bearing of the foot on the treadle will cause the follower and roller to revolve and wrap the casing tightly from end to end. If desirable a second wrapper may be put on for binding superior ends or tips, (i. e., Havana tobacco with American.) The outer shell of the cigar thus made is now removed from the machine, the follower G drawn out, and the case F with the wrappers inserted into the mold-box C A. It is then closed up and clamped, and the projecting head f of the case or former F is clamped to the cross-piece U', with the funnel-tube inserted into the former or case F. When the fragments of tobacco are packed by the spring-plunger by its up-and-down motion, and the wrapper filled when in the mold, the latter descends either through a hole, a, in the table, or, if the frame is sufficiently elevated to give

the space, until it reaches the table, and becomes disengaged from the spring case or former F, which is now empty. The wrappers of the cigar are thus firmly packed and ready to be cut and finished off at the ends.

I am aware that cigar-molds with spring-clamps and follower are used in the manufacture of cigars; but the process and material used differ substantially. Superior cigars are made by my process with the fine material usually wasted or worked up to be smoked in a pipe or for snuff. I am not aware that such a combination for forming the external part of a cigar and then filling it in with finely-cut tobacco was ever before known or used.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The revolving metallic spring-case F, on or around a central plug, G, with its pins *g g'*,

and point secured at one end by the spring-sleeve E *e*, so as to be revolved by a strap-wheel, C, and suitable gearing, in combination with the friction or traction roller H on its spring-bearings *s*, all substantially arranged and operating in the manner and for the purpose specified.

2. In combination with the collar *f* on the metallic case F, placed within the mold C A, and clamped, I claim the clasp or lock Z and catch Z', tube and spring-plunger X' W, funnel V, and supporting frame T U U', all combined and operating substantially in the manner and for the purpose set forth.

JESSE OCHS.

Witnesses:

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