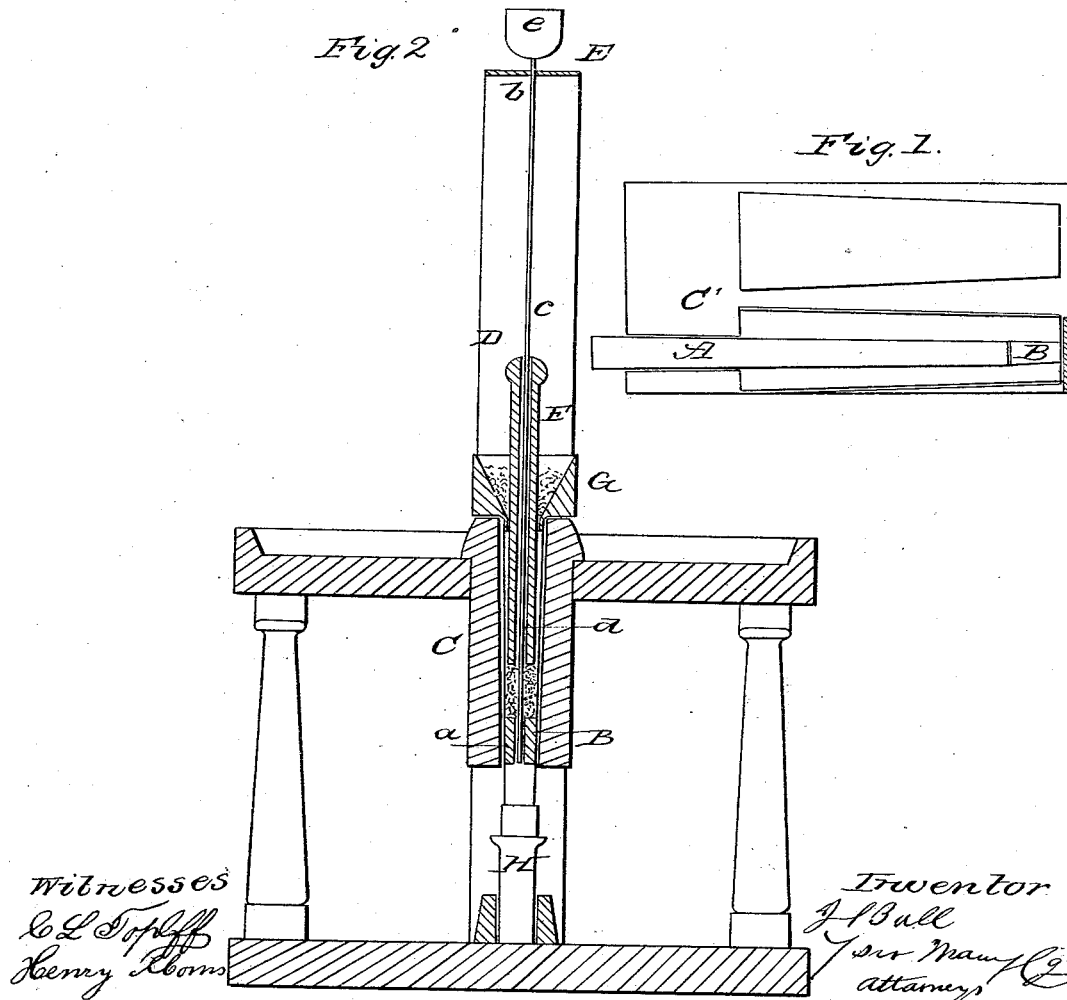


J. BALL.
Cigar Machine.

No. 45,808.

Patented Jan. 10, 1865.



UNITED STATES PATENT OFFICE.

JONATHAN BALL, OF ELMIRA, NEW YORK.

MACHINE FOR MANUFACTURING CIGARS.

Specification forming part of Letters Patent No. 45,808, dated January 10, 1865.

To all whom it may concern:

Be it known that I, JONATHAN BALL, of Elmira, in the county of Chemung and State of New York, have invented a new and useful Improvement in the Manufacture of Cigars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a plan or top view of the device which I use to prepare the wrappers. Fig. 2 is a vertical central section of my apparatus for introducing the filling.

Similar letters of reference indicate like parts.

The object of this invention is an improvement in that class of cigars which are made with a paper wrapper, and commonly known under the term "cigarettes."

The invention consists in filling the tobacco, cut or broken, around a wire, which is introduced through the longitudinal center of a tamper and of the paper wrapper, in such a manner that by means of the tamper the tobacco can be pressed tightly into the wrapper, and on withdrawing the wire a center draft is produced, which causes the cigars to burn slowly and even, requiring but little exertion of the smoker.

For the purpose of making the wrapper, I provide a former, A, Fig. 1, of hard wood or other suitable material, and of convenient length, and made slightly tapering throughout, or only at one end, if preferred. Its diameter is equal to that of cigars to be made. I also provide a mouth-piece, B, made of wood, about three-fourths of an inch (more or less) long and slightly tapering, as clearly shown in the drawings. The diameter of the thick end of the mouth-piece is equal to the thin end of the former, and it is provided with a central draft-hole, *a*, as shown in Fig. 2, where said mouth-piece is shown in section. I cut the wrapper of thin paper or other suitable material by a pattern, the length being that of the cigar, and the width sufficient to lap about a sixteenth of an inch around the former. One longitudinal edge and a strip of five-eighths of an inch across the narrowest end of the paper is then covered with a tasteless mucilage, such as gum-arabic, and the wrapper is laid

flat on a piece of board, C, with a semicircular groove. The former and mouth-piece are laid on it, as shown in Fig. 1, and by the manipulation of the fingers the wrapper is brought together and finished ready for use. The finished wrapper is introduced into a mold, C, of wood or other suitable material, which is placed vertically in the work-bench. Back of the mold rises a post, D, to a height of about seven or eight inches, and to the top end of this post a metallic plate, E, is firmly secured, as shown in Fig. 2. This plate extends forward over the center of the mold, and it is provided with a small hole, *b*, in line with the axis of the mold, to admit a wire, *c*. (Number 16 wire-gage, or of any convenient thickness.) This wire passes through the center of a tamper, F, which is made of wood, somewhat longer than the cigars to be manufactured, and equal in diameter to the thick end of the mouth-piece B. It is perforated through its longitudinal center with a hole, *d*, to admit the wire *c*. The wire is loaded with a weight, *e*, to prevent it rising spontaneously, and the tobacco is introduced through a cup or funnel, G, which is provided with a short nozzle passing down into the mold and wrapper, as seen in Fig. 2. By this nozzle the wrapper is held in position. Beneath the mold I place a standard, H, with its lower end resting on the floor, and its upper end of such a size that it will slide up and down in the bottom end of the mold. This standard serves to raise the cigar out of the mold after it is filled.

The operation is as follows: After the wrapper has been prepared, as above stated, it is dropped into the mold, with the mouth-piece resting on the top end of the standard H. The cup or funnel is then traced upon the mold, the nozzle entering the end of the wrapper, as shown in Fig. 2. The tamper is dropped through the funnel into the wrapper, with its lower end resting on the mouth-piece. The wire is introduced through the hole *b* in the plate D, and through the tamper, its lowest end passing through the perforation in the mouth-piece and resting on the standard H, as shown. The tobacco, either dampened or dry, is placed by the side of the mold, and while one hand holds the tamper and passes it up and down on the wire the other hand introduces the tobacco through the funnel.

As the tobacco drops down into the wrapper, it is firmly pressed in by the action of the tamper, and the cigar is filled to any degree of hardness or density required. When filled, the tamper is held down and the wire withdrawn, the cup is removed, and the standard H is then raised, which lifts the cigar out of the mold, when the operator dexterously crimps the open end of the wrapper over the tobacco, which prevents waste. Cigars so made draw easier and burn more uniform and afford more smoke than those made in the ordinary way. They can be made of tobacco which ordinarily is of little use, and the expense of manufacturing the same is considerably less than that of ordinary cigars.

I claim as new and desire to secure by Letters Patent—

1. The use of a wire, *c*, and tamper *F*, perforated through its longitudinal center, as described, in combination with the mold *C*, or

its equivalent, and with a suitable wrapper, constructed and operating substantially as and for the purpose herein described.

2. Also the method, substantially as herein described, of introducing the filling of a cigar around a central wire for the purpose of producing a central draft.

3. Manufacturing cigars by first inserting the wrapper into a mold and afterward filling in the tobacco, substantially as herein specified.

4. In combination with a machine constructed as herein described, the cup or funnel *G*, employed to hold the wrapper in position and admit of the introduction of tobacco after the tamper is inserted, as explained.

JONATHAN BALL.

Witnesses:

JAMES P. HALL,

M. M. LIVINGSTON.