ARNOLD & HAZMAN.

Cigaretto Machine.

No. 44,926. Patented Nov. 8, 1864.

Fig. 2

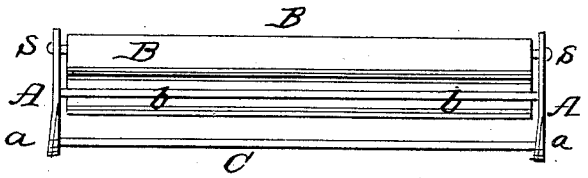


Fig. 4

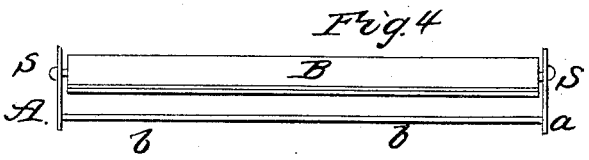


Fig. 5

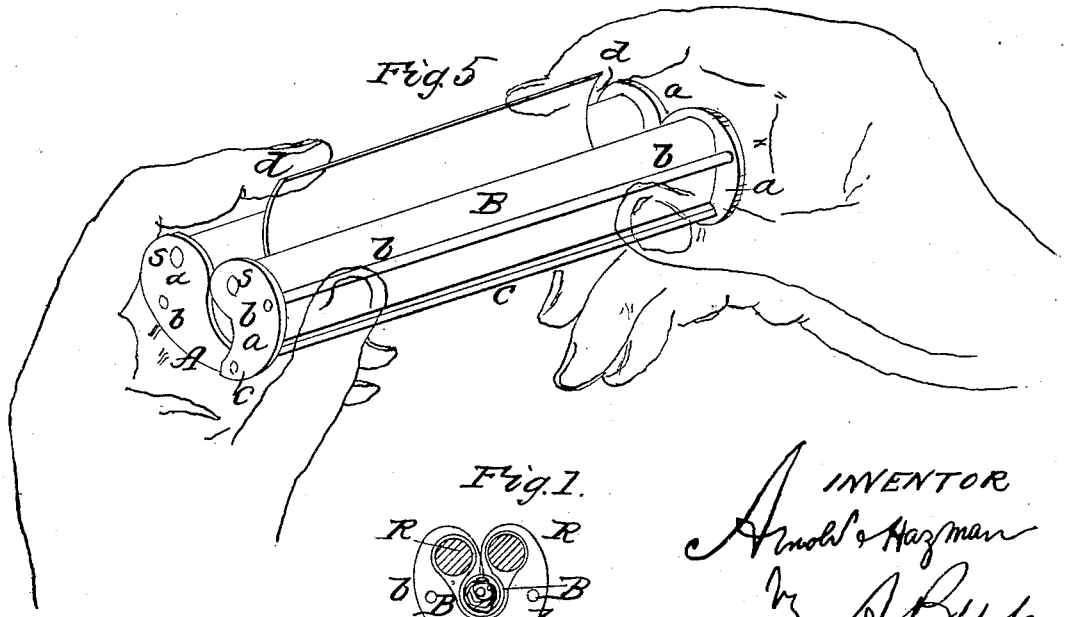


Fig. 1.

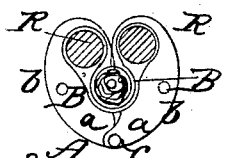
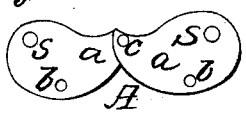


Fig. 3



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UNITED STATES PATENT OFFICE.

LOUIS L. ARNOLD AND FRANCIS X. HÁZMÁN, OF NEW YORK, N. Y.

INSTRUMENT FOR MAKING CIGARETTES.

Specification forming part of Letters Patent No. 44,926, dated November 8, 1864.

To all whom it may concern:

Be it known that we, LOUIS L. ARNOLD and FRANCIS X. HÁZMÁN, both of New York, in the county and State of New York, have invented certain new and useful Improvements in Apparatus or Machines for Making Cigarettes; and we hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional elevation, and Fig. 2 is a side view, of the said apparatus in the act of performing its operation. Figs. 3 and 4 are end and side elevations, respectively, of the said apparatus when unfolded; and Fig. 5, an isometrical perspective view of the same, exhibiting the manner of using it.

It is a matter of no little difficulty to make cigarettes by hand. Numerous devices were heretofore contrived to substitute for manual labor mechanical means for the purpose of forming a paper wrapper and of filling the same more or less compactly with tobacco. In most cases the wrapper is formed separately into a cylinder, which, being properly closed, is then filled with tobacco by means of a plunger. It has also been attempted to imitate by machinery the action of the fingers—that is, the rolling of a sheet of paper over and around a core of tobacco—but only imperfect results have thus far been obtained, on account of the want of the peculiar elasticity and pressure, which alone could heretofore be imparted by hand.

The object of this invention is twofold: first, to produce a mechanism operating by simultaneously forming the core of tobacco and winding the wrapper around it with requisite elastic or yielding pressure, so that a cigarette may be obtained which shall be neither too loose nor too tight; second, economy of construction, portability, and durability of the apparatus.

In the accompanying drawings we have represented a machine which is designed to fulfill the conditions before stated; and it consists, in the main, of a skeleton frame hinged or articulated so as to be capable of being folded and unfolded at the pleasure of the operator. This skeleton frame contains two rollers, around which an endless vulcanized india-rubber-coated band is passed, of a length calculated according to the thickness of the cigarette intended to be made.

To enable others to make and use our said invention, we shall now proceed to describe its particular construction and operation, and referring to the said drawings—

A is the skeleton frame, consisting of four palm-leaf-shaped end plates, *a*, united together by means of small rods *b*, and a hinged bar, *c*, which traverses the holes at the points of the said plates. Within the plates *a* are held two wooden cylinders or rollers, R, by means of pins *s*, inserted from the outside of the plates, and which constitute the axles of the said rollers, over which is passed an endless band, B, coated with vulcanized india-rubber.

The operation of this simple contrivance is as follows: To make a cigarette, the machine is held in a horizontal position, with the hinged bar below and the rollers above, as shown in Fig. 5, resting upon the middle fingers, the thumbs being applied onto the inner roll, while the forefingers are laid on the back roll. The skeleton frame is then slightly opened upon its hinge, so as to form the band into a trough-like receiver, upon which the requisite quantity of tobacco is uniformly spread. The frame is then closed, in which position the end plates leave no or insufficient opening for the tobacco to escape. Rotation is then imparted to the inner roll by means of the thumbs, by which operation the tobacco is formed into a sufficiently compact core or roll. We would here state that the slightest amount of rotation will suffice to effect this object, inasmuch as the band surrounds the tobacco completely, or nearly so. After the core is thus formed, the wrapper is introduced between the rolls, and rotation is continued until the said wrapper disappears from above the rolls. The paper, by the rotation of the rolls and by the movement of the band, is drawn over and around the core of tobacco, and thus completes the cigarette. The outer edge of the paper *d d*, after it is introduced between the rollers, and by them partially drawn in, may be wet, in order that it may stick and prevent unfolding or unwrapping on being removed from the machine after being completed. The mode of making cigarettes depends in some measure upon the taste and judgment of the operator. Thus, if desired, a mouth-piece of wood or

pasteboard or card-paper may be introduced, together with the tobacco, in between the rollers upon the band, and so located as that it shall be wrapped in with the paper at the extreme end thereof.

Having thus described our invention and the manner in which the same is or may be carried into effect, we desire it to be distinctly understood that we do not confine ourselves to the precise details herein set forth, as such may be varied or modified without departing from the principle thereof; but

What we claim as our invention is—

1. The machine for making cigarettes, substantially as herein described, the same consisting of a suitable hinged frame containing rollers, in combination with an endless band, when the same is coated with vulcanized india-rubber, so as to impart rolling friction with yielding pressure, substantially in the manner and for the purposes set forth.

2. In combination with an endless band and two rollers hung in a hinged frame, as described, making the said frame of a skeleton form, substantially in the manner and for the purposes set forth.

3. The combination of rollers, vulcanized india-rubber band, and skeleton frame, the whole being constructed and arranged for operation substantially in the manner herein set forth.

In testimony whereof we have signed our names to this specification before two subscribing witnesses.

LOUIS L. ARNOLD.
F. X. HÁZMÁN.

Witnesses:
S. KAUFMANN,
L. LADERER.