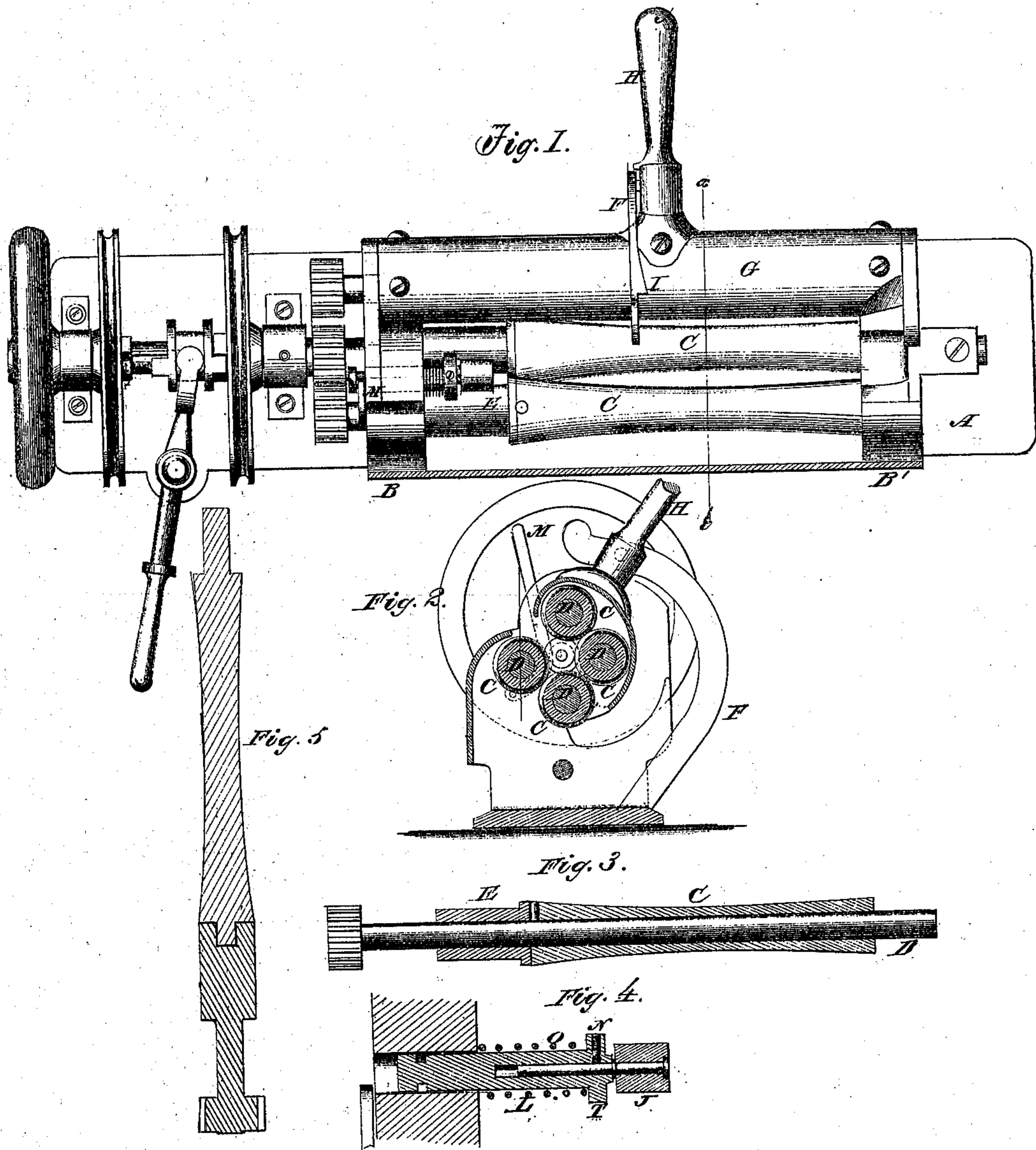


Allen & Fanning,

Cigar Machine.

No. 105620.

Patented July 26. 1870.



Witnesses:

Alex. F. Roberts
E. S. Mabey

Inventor:

J. Allen
J. Fanning
PER *M. M. C.*
Attorneys.

UNITED STATES PATENT OFFICE.

JULIAN ALLEN AND JOHN FANNING, OF BROOKLYN, NEW YORK, ASSIGNORS
TO THE AMERICAN CIGAR MACHINE COMPANY, OF NEW YORK CITY.

IMPROVEMENT IN CIGAR-MACHINES.

Specification forming part of Letters Patent No. 105,620, dated July 26, 1870.

To all whom it may concern:

Be it known that we, JULIAN ALLEN and JOHN FANNING, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Cigar-Machines; and we 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 drawing, forming part of this specification.

This invention relates to a new and useful improvement in machines for manufacturing cigars, whereby the operation is greatly facilitated; and it consists, first, in a series or group of sleeve-rollers, readily removable from their respective spindles or shafts; secondly, in an adjustable follower, by means of which the length of the "bunch" and cigar may be regulated; thirdly, in swiveling the end of the follower in such a manner as to avoid contact with the spring while revolving, thereby reducing the friction; and, lastly, in the arrangement of a lever operating in connection with a groove in the follower.

In the accompanying drawing, Figure 1 represents a top or plan view of the machine. Fig. 2 is a vertical cross-section of Fig. 1 on the line *xx*. Fig. 3 is a detailed view of one of the sleeve-rollers representing a longitudinal section. Fig. 4 is a modification of the adjustable follower and swivel, also a longitudinal section. Fig. 5 is a modification of the cigar-roller, showing another mode of arranging them in the machine.

Similar letters of reference indicate corresponding parts.

A is the bed-plate of the machine, to which the heads B B' are attached, which support the roller-spindles. C represents the rollers. These rollers are sleeves or tubes, which are made to fit onto the spindles or shaft D. The outer surface of these rollers is made to correspond with the desired shape or form of the body of the cigar. The head or conical end of the cigar is formed by another appliance provided for that purpose at the ends of the rollers.

The head B' of the machine is readily removed from the bed-plate, so that the sleeve-rollers can be slipped from their respective spindles and other sleeve-rollers put in their

place, so that cigars of different sizes and forms may be made in the machine without changing the gear-wheels. These rollers are made in sets or groups. Each single roller corresponds in form or diameter with the other rollers of the set. Any number of sets or groups may be employed for varying the size and form of the cigar. The spindles are revolved by means of gear-wheels, as seen in the drawing, and the rolls are made to revolve with their respective spindles by means of coupling-pins passing into the spindles.

We do not confine ourselves to any particular device for attaching the removable roller to the part E, connected with the gear-wheel so as to revolve with it.

Another method would be to make the removable roller a solid piece instead of a sleeve. On one end a journal might be formed, and at the other end a square central projection and a corresponding depression or hole in the part E; or the arrangement might be reversed, thereby connecting them so that both would revolve with the wheel-gearing, and at the same time the roller would be removable without disturbing the part E and wheel-gearing. The part E and journal connected therewith may be made of one piece of metal.

F is the spring which is attached to the bed-plate A. G represents the swinging frame, and H the handle by which the swinging frame is operated. This frame carries a portion of the rollers, and is opened and closed for each cigar as the bunch is introduced and the finished cigar taken out of the machine.

The spring F is so placed or adjusted that when the handle is thrown up for closing the machine a shoulder, I, on its side catches over a pin in the side of the handle and securely holds the swinging frame in the desired position while putting the wrapper on the cigar. A slight side pressure on the end of the spring releases the handle for opening the machine, as seen in Fig. 1. The portion J of the follower L is swiveled, so that it may revolve with the bunch or body of the cigar while pressing and keeping the opposite end of the cigar in the head-former. This swiveled portion A allows the cigar to revolve with less friction than it otherwise would.

The stem K, upon which the swivel J re-

volves, is made adjustable in the socket portion of the follower L, and held in position by a set-screw, N, so as to vary the length of the follower, which is required in order to make different lengths of cigars when different sets of rollers are employed.

The follower L may be adjusted in the head B of the machine and be held back by a groove near its end, as seen in Fig. 4, by means of a lever, M, operating in the groove for the purpose of making cigar-bunches on the machine. The follower being forced back gives greater length of space between the rollers to receive the tobacco filling.

O is a spiral spring around the follower, which bears against the collar P with a constant pressure, and serves to force the follower out when it is released from the small lever M.

The rollers C are made of a composition called "white metal," as they can be produced at a cheaper rate, and the tobacco leaf adheres to such metal better than to brass or other metals, thereby serving to revolve the bunch or body of the cigar with more certainty.

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

1. In a cigar-machine, one or more removable rollers, coupled with wheel-gearing, when so constructed and arranged as to be readily removable, substantially as and for the purpose specified.

2. In a cigar-machine, a follower, L, made adjustable so as to vary its length, substantially as and for the purpose set forth.

3. A follower of a cigar-machine, when swiveled at its end in such a manner that its swiveled portion may rotate without contact with the spring, substantially as and for the purpose specified.

4. The lever M, operating in a groove on the follower L, substantially as and for the purpose described.

JULIAN ALLEN.
JOHN FANNING.

Witnesses:

GEO. W. MABEE,
ALEX. F. ROBERTS.