

G. ANDERSON.
CIGAR WRAPPING MECHANISM.
APPLICATION FILED NOV. 21, 1917.

1,267,734.

Patented May 28, 1918.

Fig. 1.

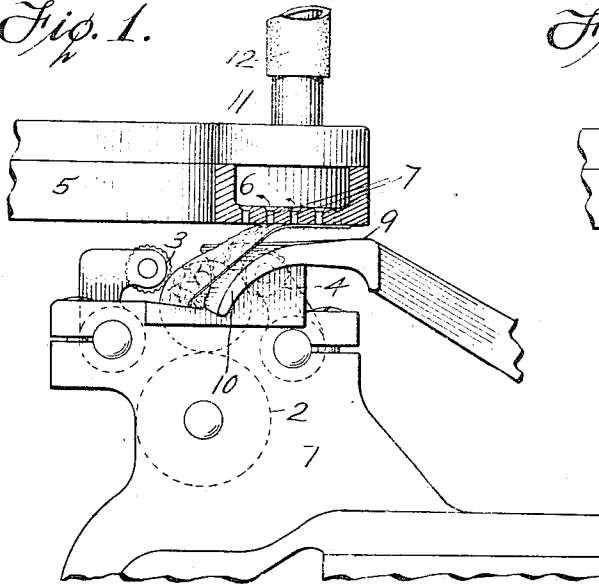


Fig. 2.

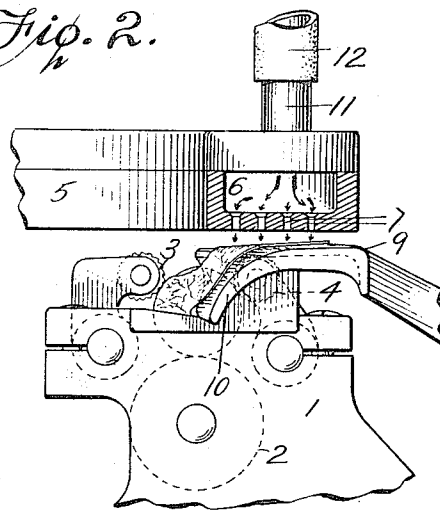
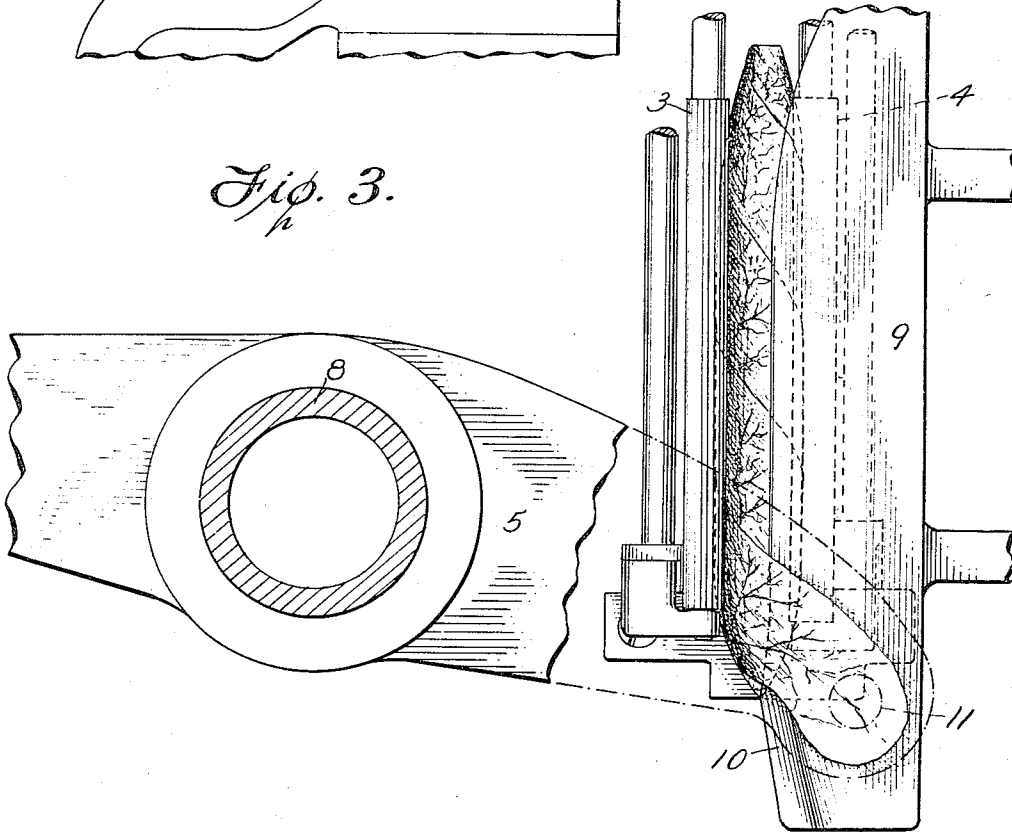


Fig. 3.



INVENTOR

Gustav Anderson

BY

Sydney J. Prescott
ATTORNEY

UNITED STATES PATENT OFFICE.

GUSTAV ANDERSON, OF BROOKLYN, NEW YORK, ASSIGNOR TO INTERNATIONAL CIGAR MACHINERY COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

CIGAR-WRAPPING MECHANISM.

1,267,734.

Specification of Letters Patent.

Patented May 28, 1918.

Application filed November 21, 1917. Serial No. 203,087.

To all whom it may concern:

Be it known that I, GUSTAV ANDERSON, a subject of the King of Sweden, residing at Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Cigar-Wrapping Mechanisms, of which the following is a specification.

This invention relates to an improvement in cigar wrapping mechanisms.

In cigar wrapping mechanisms of a certain type heretofore in common use, considerable difficulty has been experienced in controlling the flag of the wrapper after it has been pulled away from the wrapper support and before it is completely wound about the head of a cigar bunch, for the reason that the soft and delicate tobacco leaf is likely to wrinkle, and when this occurs the head of the bunch presents a more or less unsightly appearance. Many devices have been constructed with the end in view of overcoming this difficulty and have been used with varying success. Such devices, however, are more or less complicated and do not always function as intended. The main object of the present invention is the production of a very simple device for controlling the flag of the wrapper just before it is wound about the head of the cigar bunch. Another object is the production of a device of the general character above indicated in which the paste applied to the wrapper for the purpose of causing it to adhere to the cigar bunch head is made use of in controlling the wrapper flag. With these and other objects not specifically mentioned in view, the invention consists in certain constructions, combinations and parts which will be hereinafter fully described and then specifically set forth in the claims hereunto appended.

In the accompanying drawings, which form a part of this specification and in which like characters of reference indicate the same or like parts, Figure 1 is an end elevation, partly in section, of a device constructed in accordance with the invention and showing the flag of the wrapper still held to the wrapper support by the suction established therein; Fig. 2 is a similar view showing the flag of the wrapper after it has been transferred or blown down upon the tension plate; and Fig. 3 is a plan view of

the structure illustrated in Figs. 1 and 2. Referring to the drawings, 1 indicates diagrammatically the main frame of a cigar wrapping mechanism which serves to support bunch rollers 2, 3 and 4, mounted in the frame 1 in a manner well known in the art and therefore needing no further description herein. There is also provided a wrapper support provided with means for holding a wrapper in outstretched condition thereon. As shown, this wrapper support is a suction wrapper support marked 5. This support has an internal suction chamber 6 which is in communication with the exterior of the lower or operating surface of the support through a series of perforations marked 7. The suction is established in the chamber 6 by suitable mechanism connected with a sleeve 8 which is also in communication with said chamber. The wrapper support and the mechanism for establishing suction in the chamber 6 are well known in the art, and further description thereof is not needed herein.

There is further provided a tension plate 9 of a type generally well known in the art. This tension plate has a movement by means of which it is brought into the position shown in Fig. 3, partly overhanging a cigar bunch in the bunch rolling mechanism. This tension plate operating mechanism is old and well known in the art, and description and illustration of it is not needed herein. The tension plate, however, differs from the earlier tension plates in one respect; that is to say, the end adjacent the head of a cigar bunch in the bunch rolling mechanism is curved downwardly at 10 and extends approximately to the axis of said bunch. The purpose of this downwardly curved end is to provide a surface over which a wrapper flag may be dragged until it is completely wound about the head of a bunch.

It will be understood that the wrapper is held by suction in outspread condition upon the operating surface of the wrapper support 5 throughout the greater part of the relative crossing movement of said support and the bunch rolling mechanism whereby the wrapper is delivered from the support to a bunch in the bunch rolling mechanism. It may be here remarked that the mechanism by means of which this rela-

tive crossing movement is produced is old and well known in the art, and description and illustration thereof is omitted from this specification because it, as well as the other mechanisms referred to, lie wholly outside the scope of the present invention. Near the end of the wrapper delivering movement, the rear or flag end of the wrapper is drawn away from the wrapper support. This end or flag of the wrapper is provided with paste applied thereto before the wrapper delivery begins. Associated with the rear end of the wrapper support and operative only when said end is adjacent the tension plate, is an air blast mechanism consisting of a short pipe 11 to which a hose 12 is connected. The pipe 11 opens in the chamber 6, and any suitable air blast mechanism not shown may be employed for the purpose of creating an air blast through the pipe 11 in the chamber 6 at a predetermined time, which will vary in different constructions because the wrapper support itself varies in form in accordance with the shape of a cigar bunch to be wrapped; but it will always come into operation near the end of the wrapper delivering movement and at the time when the flag of the wrapper is to be released from the wrapper support.

The arrows in Fig. 1 indicate the direction the air takes when the suction in the chamber 6 is on; while the arrows in Fig. 2 show the direction the air takes when the blast is on and the suction or partial vacuum in the chamber 6 has been eliminated and air pressure substituted therefor. This air blast blows the flag of the wrapper down upon the curved end 10 of the tension plate 9, and the paste on the wrapper sets up a tendency for the flag to adhere to said curved end. This tendency is not sufficient to cause the wrapper or flag to adhere permanently to the curved end of the tension plate, but is sufficient to cause a dragging action on the flag as the bunch rolling mechanism rotates the bunch and the flag is wound around the head of said bunch. The air blast has sufficient force to transfer the flag of the wrapper from the wrapper support to the tension plate quickly enough to prevent any wrinkling of the flag, and thereafter the tendency of the flag to adhere to the tension plate is sufficient to prevent wrinkling of said flag. Control of the wrapper flag is thus maintained by very simple mechanism cooperating with the paste upon the wrapper flag itself.

Changes and variations may be made in the structure by means of which the invention is carried into effect. The invention therefore is not to be restricted to the precise details of the structure shown and described.

What is claimed is:

1. In a cigar wrapping mechanism, the

combination with a bunch rolling mechanism, of a wrapper support provided with means for holding a wrapper in outspread condition thereon, said mechanism and said support having a relative crossing movement whereby a wrapper is delivered by the support to a bunch in said mechanism, a wrapper tension plate, and means associated with the rear end of the support and operative when said end is adjacent said plate for transferring the flag of the wrapper from the support to the plate.

2. In a cigar wrapping mechanism, the combination with a bunch rolling mechanism, of a suction wrapper support, said mechanism and said support having a relative crossing movement whereby a wrapper is delivered by the support to a bunch in said mechanism, a wrapper tension plate, and air blast mechanism connected with the rear end of the support and operative when said end is adjacent said plate for blowing the flag of the wrapper from the support to the plate.

3. In a cigar wrapping mechanism, the combination with a bunch rolling mechanism, of a suction wrapper support, said mechanism and said support having a relative crossing movement whereby a wrapper is delivered by the support to a bunch in said mechanism, a wrapper tension plate provided with an end downwardly curved and extending approximately to the axis of said bunch, and air blast mechanism connected with the rear end of the support and operative when said end is adjacent said plate for blowing the flag of the wrapper from the support to the curved end of the plate.

4. In a cigar wrapping mechanism, the combination with a bunch rolling mechanism, of a suction wrapper support adapted to support a wrapper the rear or flag end of which is supplied with paste, said mechanism and said support having a relative crossing movement whereby a wrapper is delivered by the support to a bunch in said mechanism, a wrapper tension plate provided with an end downwardly curved and extending approximately to the axis of said bunch, and air blast mechanism connected with the rear end of the support and operative when said end is adjacent said plate for blowing the pasted flag of the wrapper from the support to the plate, whereby the tendency of the flag of the wrapper to adhere to the curved end of the plate maintains the same in outspread condition as it is dragged over the said curved end and wound about the head of a bunch.

5. In a cigar wrapping mechanism, the combination with a wrapper support having an internal suction chamber, of an air blast mechanism connected with the rear end of said chamber and operative near the end of the wrapper delivering movement to blow

the flag end of the wrapper from the support.

6. In a cigar wrapping mechanism, the combination with a wrapper support provided with means for holding a wrapper in
5 outspread condition thereon, of air blast mechanism connected with the rear end of

said support and operative near the end of the wrapper delivering movement to blow the flag end of the wrapper from the sup- 10 port.

In testimony whereof, I have signed my name to this specification.

GUSTAV ANDERSON.