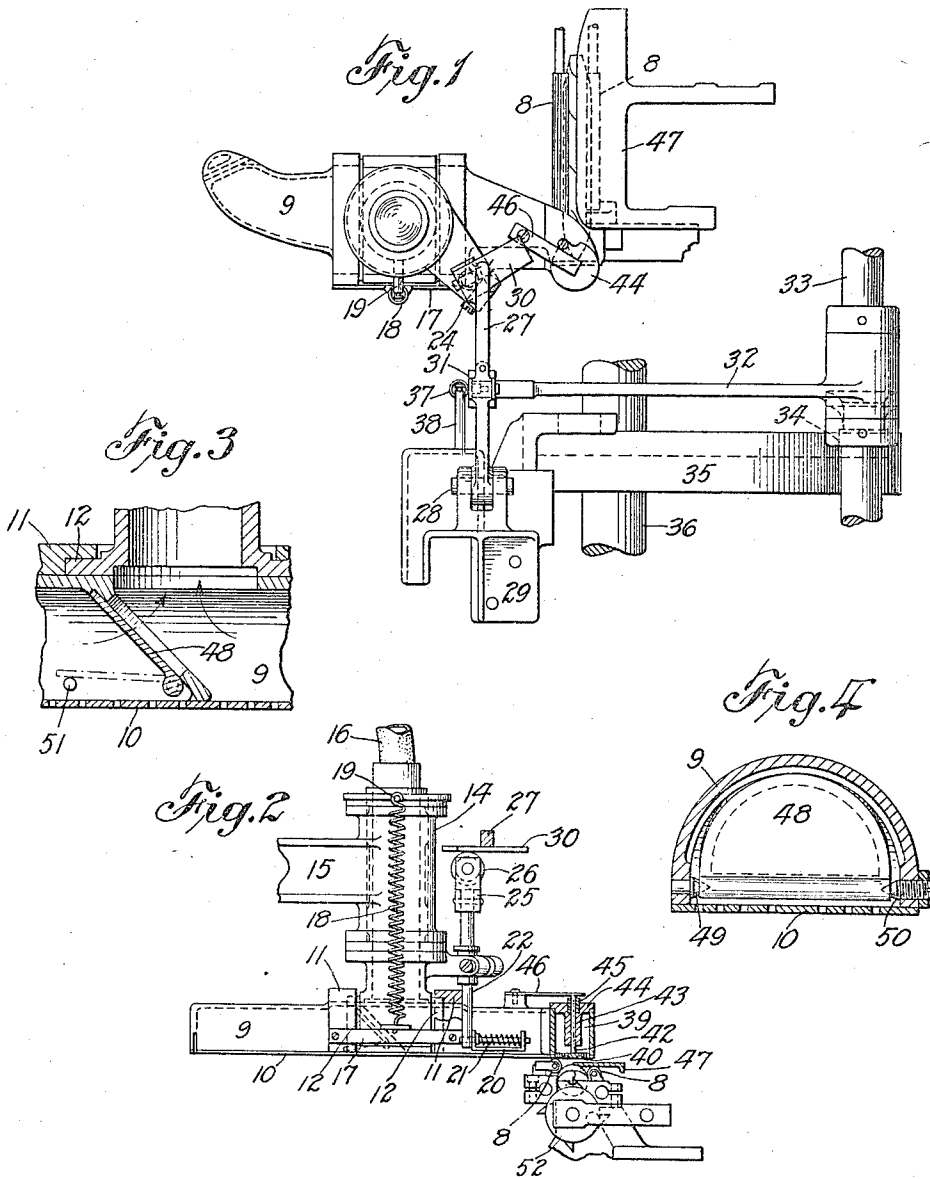


V. E. HANSEN.
CIGAR WRAPPING MECHANISM.
APPLICATION FILED MAR. 22, 1916.

1,277,574.

Patented Sept. 3, 1918.

2 SHEETS—SHEET 1.



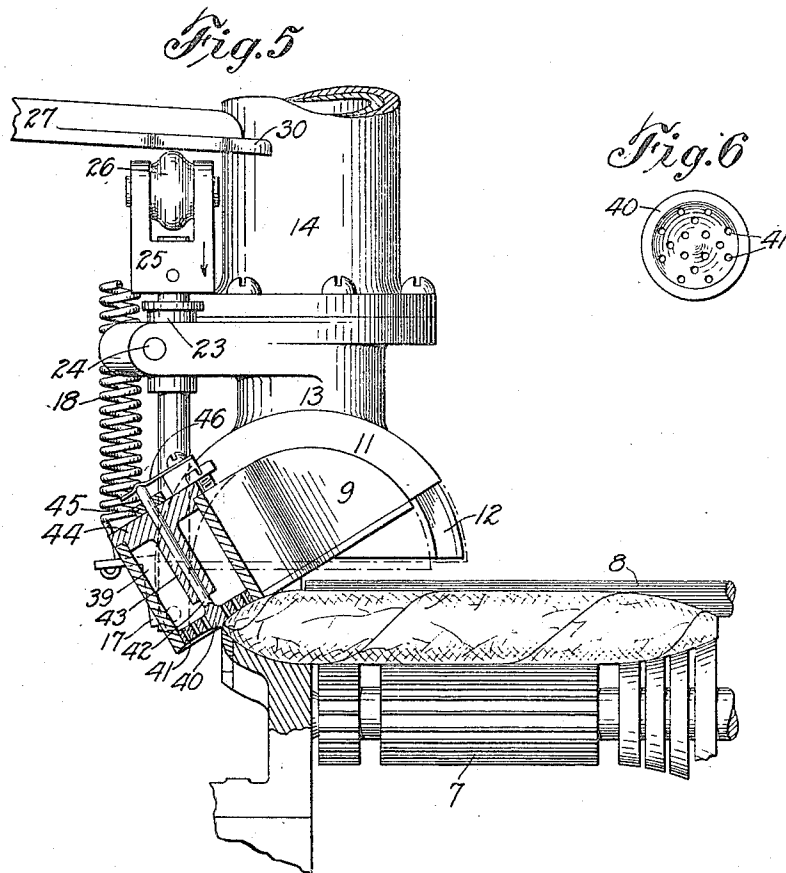
Inventor
Victor Emilis Hansen
by Sydney Sherrcott, atty.

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2 SHEETS—SHEET 2.



Inventor
Victor Emilius Hansen
by Sydney Prescott, Atty.

UNITED STATES PATENT OFFICE.

VICTOR EMILIUS HANSEN, OF BROOKLYN, NEW YORK, ASSIGNOR TO INTERNATIONAL CIGAR MACHINERY COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

CIGAR-WRAPPING MECHANISM.

1,277,574.

Specification of Letters Patent.

Patented Sept. 3, 1918.

Continuation of application Serial No. 24,889, filed April 30, 1915. This application filed March 22, 1916. Serial No. 85,780.

To all whom it may concern:

Be it known that I, VICTOR EMILIUS HANSEN, a citizen of the United States, residing at Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Cigar-Wrapping Mechanism, of which the following is a specification.

This invention relates to an improvement in cigar wrapping mechanisms particularly adaptable for use in automatic cigar machines, and this application is a continuation of my application filed April 30, 1915, Serial No. 24889.

Cigar machines are known which include cigar wrapping mechanism comprising a cigar rolling device, a wrapper support, and means for producing a relative crossing movement of the wrapper support and rolling device which is the resultant of an approaching, an angular, and a traversing movement. In all such machines, however, the wrapper support operates in a fixed plane and when the wrapper is delivered from the support to the head of the cigar in the rolling device, other devices must be used to control the extreme or flag end of the wrapper as it leaves the wrapper support and is wound upon the conical or tapered head of the cigar in the rolling device. These devices are more or less complicated and are troublesome. Moreover, when a cigar bunch having a long tapered section is wrapped in the old well known machines, one edge of the wrapper support during the crossing movement, or of the tension plate when a tension plate is used, is farther away from the bunch in the cigar rolling device than the other. This results in a more or less uneven delivery of the wrapper to the cigar bunch and a tendency to a wrinkling of the wrapper. One of the objects of the present invention is the production of a cigar wrapping mechanism provided with a wrapping device and a wrapper support having a relative crossing movement whereby the wrapper is delivered by the support to the device; and further provided with means for tilting the wrapper support during the wrapper delivering movement, particularly at the end of the wrapper delivering movement, so that the wrapper is delivered smoothly and retained upon the support until it is completely wound about the

head of the cigar. A further object of the invention is the production of a device of this general character in which a heading device is carried by the wrapper support and tilted with it, thus eliminating the necessity for separate heading devices which have heretofore been found necessary. A further object of the invention is the production of a device employing a spring pressed rotary heading device carried by the support which is brought into contact with the cigar head as the flag of the wrapper is delivered thereto and is operated by the friction of the heading device in contact with the cigar head, so that the flag of the wrapper is smoothly laid around the head of the cigar. A further object of the invention is the production of a tilting wrapper support carrying a heading device, both said wrapper support and said heading device having a suction chamber therein and the operating surface of the heading device being annularly concaved to conform to the contour of the cigar head. A further object of the invention is the production of a wrapper support having a two-part suction chamber therein and a clack valve within the support and operative by suction to cut off suction from one of the parts of the support, so that after the wrapper has been partially wound around a bunch in a wrapping device, the part of the wrapper support which the wrapper has left is automatically cut off so that air will not be drawn therethrough from the atmosphere to lower the force of the suction in the other part of the wrapper support. With these and other objects not specifically mentioned in view, the invention consists in certain constructions and combinations 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 a plan view of a device constructed in accordance with the invention. Fig. 2 is a side elevation of a portion of the structure shown in Fig. 1, certain parts being shown in section. Fig. 3 is a fragmentary sectional view, upon an enlarged scale, of the tilting wrapper support showing the clack valve for cutting off

suction from a part of the support. Fig. 4 is a cross-sectional view, upon an enlarged scale, of the wrapper support showing the clack valve. Fig. 5 is a detail fragmentary view, upon an enlarged scale, illustrating generally a wrapping device and the tilting wrapper support shown in tilted position, the heading device being shown in section. And Fig. 6 is a detail view of the operating face of the heading device.

In carrying the invention into effect, there is provided a wrapping device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, and means for producing a relative tilting movement of the wrapping device and the wrapper support during the wrapper delivering movement. There is further provided a heading device carried by the wrapper support. In the best constructions, the wrapping device and means for tilting the wrapper support both operate in fixed position, while the wrapper support is given the crossing movement necessary to deliver a wrapper to the device. In the best constructions also, cam controlled means are employed for tilting the wrapper support, and means are provided for holding the wrapper support in a fixed plane during the major portion of its wrapper delivering movement, while the means for tilting the wrapper support comes into operation only at the end of its wrapper delivering movement; that is to say, when the end of the wrapper is wound around the head of a cigar in the wrapping device. In the best constructions also, the wrapping device comprises a group of cigar rolls and operative connections. In the best constructions also, the heading device is of a rotary type and is spring pressed and its operating surface is annularly concaved to conform to the contour of a cigar head. In the best constructions also, both the wrapper support and the heading device have suction chambers therein and both operate to hold the wrapper during the major portion of the wrapper delivering movement, while the heading device acts alone to hold the flag of the wrapper at the extreme end of the wrapper delivering movement. In the best constructions also, the wrapper support has a two-part suction chamber therein and means operated by suction are provided for cutting off suction from one of the parts of the support to prevent incoming air from decreasing the force of the suction in the other part. All of the above elements may be varied in construction within wide limits.

The device selected to illustrate the invention is but one of many possible concrete embodiments of the same and the invention therefore is not to be restricted to the precise details of the structure shown and described.

Moreover, certain parts of the invention are capable of use independent of other parts and such independent use is contemplated.

Referring to the drawings, which as above stated disclose one embodiment of the invention, 7 indicates the main roll and 8 indicates the coöperating rolls of a group of cigar rolls which are well known in the art and commonly used in cigar wrapping mechanisms. The construction of these rolls lies wholly outside of the present invention and is not necessary to an understanding thereof, and further description of the same is therefore omitted in the interest of brevity.

For the purpose of automatically delivering a wrapper to the group of rolls 7—8, there is provided a wrapper support indicated generally by the reference character 9. This wrapper support has an operating surface 10 perforated in a well known manner, and is hollow and semi-circular in cross section, the interior of the wrapper support forming a suction chamber. The wrapper support 9 is provided with semi-annular saddles 11 fixed thereto and these saddles embrace oppositely disposed semi-annular guides 12 formed in a hollow carrier 13, the interior of which is in open communication with the interior of the wrapper support. The carrier 13 is rotatably mounted in a head 14 formed in the end of an arm 15 by the movement of which the wrapper support is given a movement to deliver a wrapper to the wrapper rolls 7—8. Projecting upwardly from the interior of the hollow head 14 is a pipe or hose 16 adapted to be connected to a suitable suction producing mechanism. The particular construction of the head 14 and arm 15, and of the means for giving said parts the movement necessary to effect the delivery of a wrapper to the wrapping rolls 7—8, and the particular construction of the pipe 16 and the means for establishing suction therein, are all well known in the art and lie wholly outside of the present invention and are not necessary to an understanding of the same. Further description of these parts is therefore omitted in the interest of brevity.

At the last part of the wrapper delivering movement; that is, when the flag of the wrapper is to be delivered to the conical or tapered head of a cigar lying within the wrapping rolls 7—8, it is highly desirable that control of the extreme end of the wrapper be not lost but that it be held upon the support until it is wholly wrapped about the cigar head. To effect this desirable result, means are provided for tilting the wrapper support at this time. During the major portion of the wrapper delivering movement, when the cigar to be wrapped is of the shape shown in the drawings, it is not necessary that the wrapper support be tilted.

To hold it in position so that it operates in a fixed plane during the major portion of the wrapper delivering movement, the wrapper support is provided with a bar 17 bridging the saddles 11 on one side of the support, and to this bar is attached one end of a spring 18. The other end of the spring 18 is hooked over a stud 19 carried on the head 14 above referred to. The wrapper support is further provided with a bracket 20 supporting a spring pressed plunger 21. This spring pressed plunger engages a suitable aperture in a post 22, which is suitably mounted in a bush 23, the bush being clamped at 24 to a boss projecting from the carrier 13. Upon the upper end of the post 22 is mounted a fork 25 carrying an anti-friction roller 26 of well known construction. It will be understood that this post and roller 26 travel with the wrapper support.

For the purpose of operating the post 22 at the proper time to tilt the wrapper support, there is provided a lever 27 which is fulcrumed at 28 to a bracket 29 suitably supported from the main frame of the machine. At one end of the lever 27 is formed a presser foot 30 adapted to engage the anti-friction roller 26 during the last part of the wrapper delivering movement. The lever 27 is connected by means of a link 31 to a bell-crank lever 32, which is fulcrumed upon a bar 33 suitably supported from the main frame of the machine. This bell-crank lever 32 carries a bowl 34 engaging a suitable cam groove formed in the face of a cam disk 35 which disk is fast upon a shaft 36, and this shaft 36 is one of the main shafts of the machine in connection with which the device is used. A spring 37 connects the link 31 with a post 38, which post is secured to the bracket 29 before referred to, the function of this spring being to move the bell-crank lever 32 and the lever 27 in one direction, while the cam 35 moves them in the opposite direction.

It is to be understood that when a cigar of a different shape from that shown in Fig. 5 is to be wrapped, particularly a cigar having a long tapered head section, the presser foot 30, the tension plate 47, and the cam controlling the movement of said presser foot will all be somewhat changed in form or extent so that the tilting action will begin earlier during the wrapping operation than in the specific structure used to illustrate the invention.

At one end of the wrapper support 9, there is provided a cylindrical chamber 39 open to the interior of the wrapper support so that the suction established within the wrapper support is also established within this chamber. Mounted at one end of the chamber 39 is a heading device including a circular disk 40 provided with perfora-

tions 41. The operating face of this disk is annularly concaved, as clearly shown in Fig. 5, to conform to the contour of a cigar head. The disk 40 has a stem 42 extending therefrom and journaled in a boss 43 formed on a plate 44 which is screwed or otherwise fastened to the top of the chamber 39. Above the plate 44, a collar 45 is fastened to the stem 42, the function of this collar being to limit a downward movement of the stem 42 and disk 40. Screwed to the top of the wrapper support 9 is a flat spring 46 which bears upon the upper end of the stem 42 and which tends to hold the collar 45 in contact with the plate 44. When the parts are in this position, the operating face of the disk 40 is substantially in alignment with the plate 10 of the wrapper support 9, so that the wrapper is held throughout its length by the suction established within the wrapper support 9 and operating through the perforations in the plate 10 and disk 40. When the wrapper has been delivered to the major portion of a cigar lying within the wrapping rolls 7-8, and the flag of the wrapper is being wound around the extreme head of the cigar, the disk 40 alone holds the wrapper in proper position through the agency of the suction established within the support 9 and the chamber 39 operating through the perforations 41. At this time; that is, when the parts are in the position shown in Fig. 5, the heading device or disk 40 is rotated by the friction established between its operating face and the cigar head, so that the flag of the wrapper is rolled about the cigar head and smoothed down into its final position by this action. It will be readily understood that control of the wrapper is never for an instant lost when the mechanism above described is used, and that no further heading device is necessary to smooth the wrapper down upon the head of the cigar.

A tension plate 47 of well known construction is provided for the purpose of guiding the wrapper to the bunch between the wrapping rolls 7-8 during the major portion of the wrapping operation. By an inspection of Fig. 1, however, it will be seen that this tension plate effects its purpose before the heading device comes into action and before the wrapper support is tilted, so that the heading device alone not only performs the function of heading the cigar, but performs the further functions of controlling the flag of the wrapper at the end of the wrapper delivering movement and of rolling it smoothly about the head of the cigar.

For the purpose of preventing air, passing through the perforated plate 10 of the wrapper support 9 after a portion of the wrapper has been delivered to the wrapping rolls 7-8, from interfering with the wrapper holding power of the suction established

within the wrapper support, the wrapper support is divided into two parts and communication between these parts and the interior of the carrier 13 is controlled by a
5 clack valve 48, which is mounted upon cone pivots 49 and 50, the latter being adjustable. This clack valve is very light and normally rests upon a stud 51 in the side of the wrapper support 9. When the wrapper has left
10 that portion of the wrapper support lying to the left of the clack valve, as shown in Fig. 3, the air passing through the perforations of the plate 10 at that part of the wrapper support and in the direction of the
15 broken line arrow, lifts the valve to the position shown in Fig. 3, and thereby cuts off suction from that part of the wrapper support from which the wrapper has been delivered to the wrapping rolls. When the
20 wrapper has been fully delivered, however, the clack valve drops of its own weight to the position shown in broken lines in Fig. 3.

A nicking device indicated generally at 52 is, or may be, employed for the purpose
25 of nicking the wrapper flag as it is wound upon the cigar head.

In view of the foregoing, a detailed description of the operation of the device is deemed unnecessary and is therefore omitted
30 in the interest of brevity.

What is claimed is:

1. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative movement whereby a wrapper is delivered by the
35 support to the device, of means for producing an additional relative movement of the device and support arranged and adapted to cause the support to be brought into contact with a bunch lying within the device as the wrapper is being delivered.

2. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a movement
45 whereby said support delivers a wrapper to the device, of means for producing an additional movement of the support arranged and adapted to bring said support in contact with a bunch lying within the device as the wrapper is being delivered.

3. A cigar wrapping machine provided with mechanism for controlling the wrapper to the end of the wrapping operation, said mechanism comprising a bunch rolling device and a wrapper support having a relative
55 crossing movement whereby the support delivers a wrapper to the bunch rolling device, and means for producing a tilting movement of the wrapper support which
60 conforms with the longitudinal curvature of a bunch within the bunch rolling device.

4. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing

movement whereby a wrapper is delivered
65 by the support to the device, of means for tilting the wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

5. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered
70 by the support to the device, of cam controlled means for tilting the wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

6. In a cigar wrapping mechanism, the combination with a group of wrapping rolls and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the rolls, of cam
85 controlled means for tilting the wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

7. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support having a movement whereby it crosses and in crossing delivers a
95 wrapper to the device, and means for tilting the wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

8. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support having a movement whereby it crosses and in crossing delivers a
100 wrapper to the device, and cam controlled means for tilting the wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

9. In a cigar wrapping mechanism, the combination with a group of wrapping rolls, of a wrapper support having a movement whereby it crosses and in crossing delivers a
110 wrapper to the rolls, and cam controlled means for tilting the wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

10. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the device, means for holding
120 the wrapper support in a fixed plane during the major portion of its wrapper delivering movement, and means for tilting the wrapper support near the end of its wrapper de-

livering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

11. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the device, means for holding the wrapper support in a fixed plane during the major portion of its wrapper delivering movement, and a cam actuated lever for tilting the wrapper support when said support comes within the range of action of said lever arranged and adapted to control the wrapper to the end of the wrapping operation.

12. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support and carrier therefor having a movement whereby the wrapper support crosses and in crossing delivers a wrapper to the device, and means for oscillating the wrapper support in its carrier during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

13. In a cigar wrapping mechanism, the combination with a bunch rolling device operative in a fixed position, of a wrapper support and a carrier therefor having a crossing movement whereby a wrapper is delivered by the support to the device, and cam actuated means operative in a fixed position and adapted to engage the wrapper support to oscillate the same in its carrier during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

14. In a cigar wrapping mechanism, the combination with a bunch rolling device and a suction wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for tilting the wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

15. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a suction wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the rolling device, and means for tilting the suction wrapper support during a part of the wrapper delivering movement arranged and adapted to control the wrapper to the end of the wrapping operation.

16. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for

producing a relative tilting movement of the bunch rolling device and the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.

17. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for producing a relative tilting movement of the bunch rolling device and the wrapper support near the end of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.

18. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for tilting the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.

19. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of cam controlled means for tilting the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.

20. In a cigar wrapping mechanism, the combination with a group of wrapping rolls and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the rolls, of cam controlled means for tilting the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.

21. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the device, means for tilting the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.

22. In a cigar wrapping mechanism, the combination with a bunch rolling device, of

- a wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the device, cam controlled means for tilting the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
23. In a cigar wrapping mechanism, the combination with a group of wrapping rolls, of a wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the rolls, cam controlled means for tilting the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
24. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the device, means for holding the wrapper support in a fixed plane during the major portion of its wrapper delivering movement, means for tilting the wrapper support near the end of its wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
25. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the device, means for holding the wrapper support in a fixed plane during the major portion of its wrapper delivering movement, a cam actuated lever for tilting the wrapper support when said support comes within the range of action of said lever, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
26. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a wrapper support and carrier therefor having a movement whereby the wrapper support crosses and in crossing delivers a wrapper to the device, means for oscillating the wrapper support in its carrier during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
27. In a cigar wrapping mechanism, the combination with a bunch rolling device operative in a fixed position, of a wrapper support and a carrier therefor having a crossing movement whereby a wrapper is delivered by the support to the device, cam actuated means operative in a fixed position and adapted to engage the wrapper support to oscillate the same in its carrier during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
28. In a cigar wrapping mechanism, the combination with a bunch rolling device and a suction wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for tilting the wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
29. In a cigar wrapping mechanism, the combination with a bunch rolling device, of a suction wrapper support having a movement whereby it crosses and in crossing delivers a wrapper to the rolling device, means for tilting the suction wrapper support during a part of the wrapper delivering movement, and a heading device carried by the wrapper support and adapted to come into action at the end of the wrapper delivering movement.
30. In a cigar wrapping mechanism, the combination with a traveling wrapper support, of a heading device carried by said support.
31. In a cigar wrapping mechanism, the combination with a traveling wrapper support, of a rotary heading device carried by said support.
32. In a cigar wrapping mechanism, the combination with a traveling wrapper support, of a spring pressed rotary heading device carried by said support.
33. In a cigar wrapping mechanism, the combination with a traveling wrapper support, of a rotary heading device carried by said support the operating surface of said heading device being annularly concaved to conform to the contour of a cigar head.
34. In a cigar wrapping mechanism, the combination with a traveling wrapper support, of a rotary heading device carried by said support and operative by friction established by contact of said heading device with a cigar head.
35. In a cigar wrapping mechanism, the combination with a traveling wrapper support, of a heading device carried by said support at one end thereof.
36. In a cigar wrapping mechanism, the combination with a wrapper support, of a heading device carried by said support both said support and said heading device having suction chambers therein.
37. In a cigar wrapping mechanism, the combination with a wrapper support, of a

rotary heading device carried by said support both said support and said rotary heading device having suction chambers therein.

38. In a cigar wrapping mechanism, the combination with a wrapper support, of a spring pressed rotary heading device carried by said support said support and said spring pressed rotary heading device having suction chambers therein.

39. In a cigar wrapping mechanism, the combination with a wrapper support, of a rotary heading device carried by said support the operating surface of said heading device being annularly concaved to conform to the contour of a cigar head both said support and said rotary heading device having suction chambers therein.

40. In a cigar wrapping mechanism, the combination with a wrapper support, of a rotary heading device carried by said support and operative by friction established by contact of said heading device with a cigar head both said wrapper support and said rotary heading device having suction chambers therein.

41. In a cigar wrapping mechanism, the combination with a wrapper support, of a heading device carried by said support at one end thereof both said support and said heading device having suction chambers therein.

42. In a cigar wrapping mechanism, the combination with a wrapper support having a two-part suction chamber therein, of a clack valve within the support and operative by suction to cut off suction from one of the parts of the support.

43. In a cigar wrapping mechanism, the combination with a wrapper support having a two-part suction chamber therein, of means operative by suction to cut off suction from one of the parts of the support.

44. In a cigar wrapping mechanism, the combination with a wrapper support having a two-part suction chamber therein, of means within the support and operative by suction to cut off suction from one of the parts of the support.

45. In a cigar wrapping mechanism, the

combination with a wrapper support, of a heading device carried by the said support at one end thereof both said support and said device having operating surfaces lying substantially in a common plane, and means for holding a wrapper upon said surfaces in outstretched condition.

46. In a cigar wrapping mechanism, the combination with a wrapper support, of a heading device carried by said support at one end thereof both said support and said device having suction chambers therein and suction operating surfaces lying substantially in a common plane.

47. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for producing a relative tilting movement of the bunch rolling device and the wrapper support about an axis between said device and said support.

48. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for tilting the wrapper support about an axis between said device and said support.

49. In a cigar wrapping mechanism, the combination with a bunch rolling device and a wrapper support having a relative crossing movement whereby a wrapper is delivered by the support to the device, of means for producing a relative tilting movement of the bunch rolling device and the wrapper support about an axis substantially co-incident with the operating surface of said support.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

VICTOR EMILIUS HANSEN.

Witnesses:

SYDNEY J. PRESCOTT,
ELIZABETH LOUISE RUSSELL.