

April 30, 1935.

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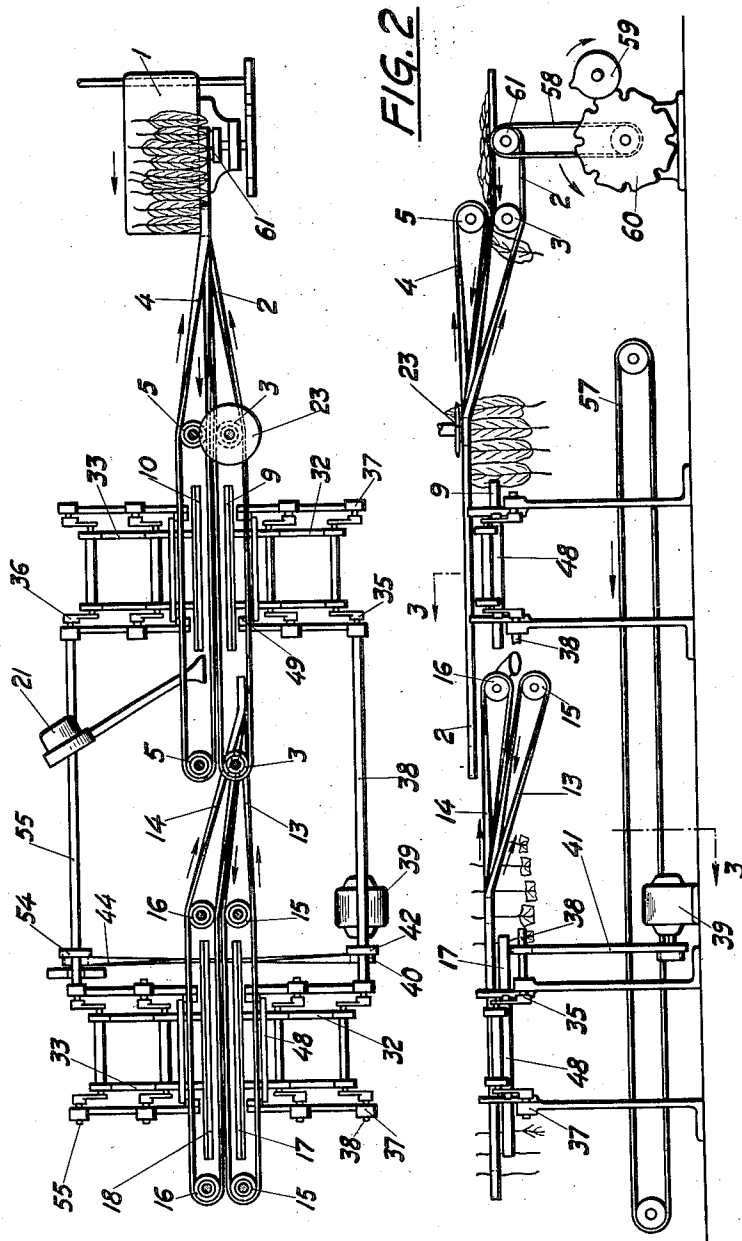
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METHOD OF AND DEVICE FOR STRIPPING TOBACCO

Filed March 23, 1931

3 Sheets-Sheet 1

FIG. 1



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3 Sheets-Sheet 2

FIG. 3

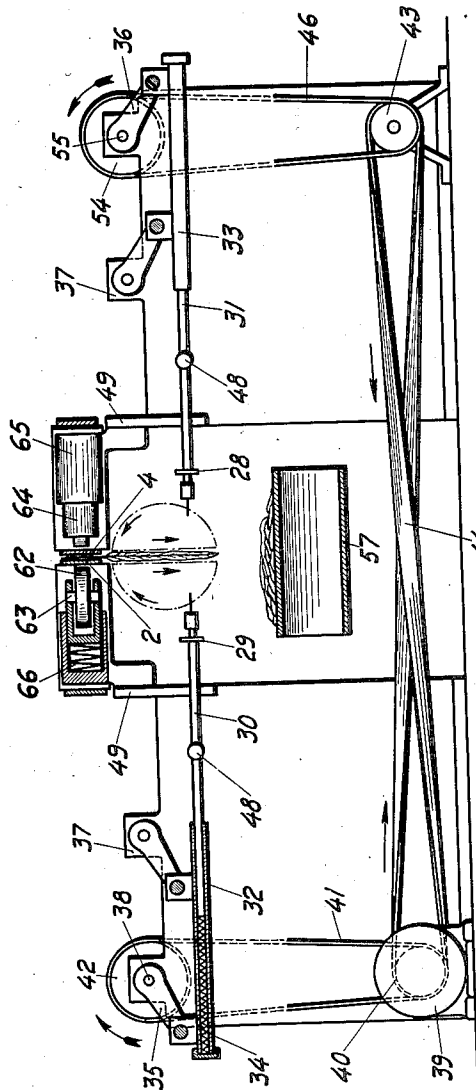
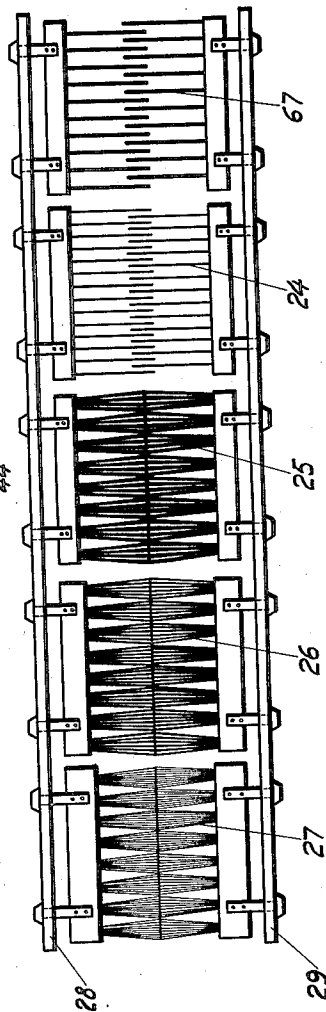


FIG. 4



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3 Sheets-Sheet 3

FIG. 5

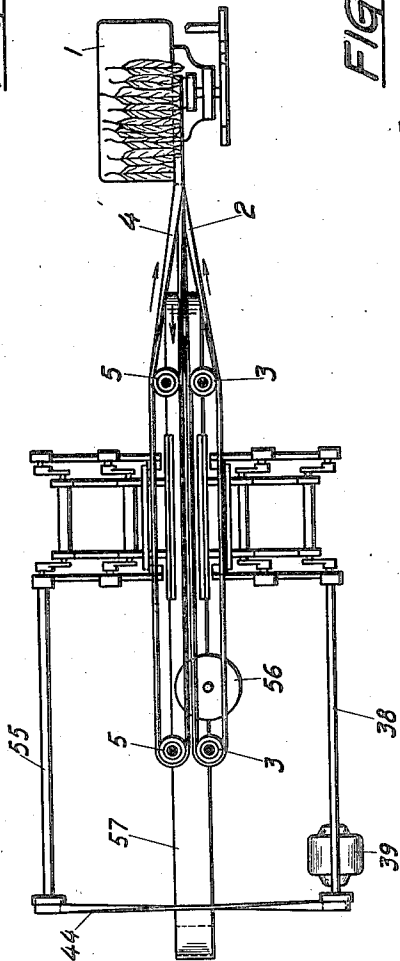
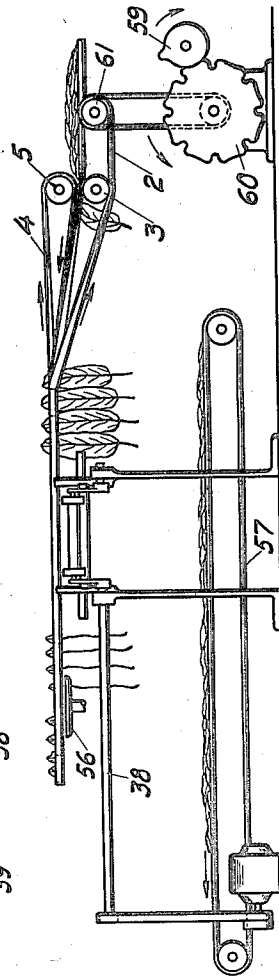


FIG. 6



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METHOD OF AND DEVICE FOR STRIPPING
TOBACCO

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34 Claims. (Cl. 131—57)

This invention relates to a method of stripping the blades of tobacco leaves off their stems and apparatus for carrying out said method.

In the known devices for this purpose the bottom or stem ends of the leaves are gripped between gripping elements, and stripping elements strip the blades from the stems in such a way that the blade is separated from the stem in a movement starting at the stem end and proceeding towards the top end of the leaf.

The present invention involves a method of stripping in the opposite direction, viz. from the top end towards the stem end which closely resembles the method followed when the leaves are stripped by hand and accordingly offers the same advantages in regard to a minimum of waste.

Mechanical stripping methods and apparatus for stripping tobacco leaves from the tip end towards the butt end have been proposed heretofore, but not in the manner contemplated in this invention which consists in freely suspending the leaves by their tip ends and stripping them, in one movement, from tip to butt end, with the exception of the small part of the tip by which they are suspended and which may later be severed from the otherwise stripped stems, leaving the tender part of the stem in the tip, as this is not objectionable. The action of the stripping elements, according to this invention, is of the nature of tearing the blades off the stems, including the veins which easily become separated from the stems when the stripping is done in accordance with the method and by means of the apparatus of this invention.

A further characteristic feature of the invention is that during the course of the stripping operation the tobacco leaves remain stationary and the stripping elements move alongside the leaves in a direction along their stems, with a speed which gradually increases to a maximum and which after that maximum gradually decreases again. This feature constitutes a considerable advantage over known devices in which the speed is uniform from the beginning to the end of the stripping operation and therefore the risk of severing or breaking the stems is considerable, especially at the beginning of the operation.

Another characteristic feature of the present invention is that, after each stripping movement is completed, the stripping elements are pulled away from the tobacco leaves in a direction approximately at right angles to the stem of the leaf, thereby preventing portions of the blades or of the stems from adhering to the stripping elements.

Still another characteristic feature of the invention is that the stripping is completed gradually as the tobacco leaves are repeatedly submitted to the action of the stripping elements, the number of stripping operations to which the

leaves are submitted being adjustable, according to the requirements of the kind of tobacco to be stripped, which causes a perfect stripping no matter what kind the tobacco is.

According to the invention the bunches of tobacco leaves are loosened and subjected to the action of the stripping elements in that state. Now, it is obvious that the leaves which together constitute a bunch are not equal in regard to their tenacity. Therefore stripping elements of different shapes and other different characteristics are required to obtain a satisfactory stripping of all the leaves in the bunch. This is obtained in the following manner:

During the course of their treatment in the stripping machine made according to this invention the tobacco leaves proceed through the machine in a direction at right angles to their stems, and in the form of a continuous fringe of tobacco leaves, secured at their tops to a conveyor, the stem ends hanging vertically downward.

This continuous fringe of suspended leaves passes between a succession of cooperating sets of stripping elements arranged on opposite sides alongside the said fringe.

The succession of cooperating sets of stripping elements is arranged in such a way that these stripping elements, which are partly in the form of combs and partly in the form of brushes, gradually decrease in regard to the cross section of the comb teeth and the stiffness of the brush bristles, and gradually increase the intensity of performance, or, in other words, an increasing degree of penetration of the suspended leaves of the tobacco-leaf-fringe by the stripping elements takes place.

This method of stripping tobacco leaves is carried out by means of a mechanical device which performs the stripping in a continuous operation. The device comprises a conveyor consisting, for instance, of two cooperating conveyor belts between which the tobacco leaves are gripped in such a way that the leaves are suspended at the tops and the stem ends hang vertically downward. The conveyor belts move along between sets of cooperating stripping elements arranged on opposite sides thereof, intermittently, so that the respective bunches of tobacco leaves are successively brought within the range of action of the different sets of stripping elements and, during the course of the stripping operation, while the leaves are submitted to the action of the stripping elements, the conveyor belts are stopped and the tobacco leaves remain stationary.

The cooperating stripping elements arranged on opposite sides of the conveyor belts are driven by a separate driving mechanism which causes them to move simultaneously towards each other and the tobacco leaves between them, engaging

said leaves first at the top ends, adjacent to the conveyor belts, then moving downwards in parallel planes along the leaf stems, thus performing the stripping operation, and afterwards to move simultaneously away in opposite directions. The cycle of movements of the stripping elements is completed when they re-occupy their initial position, from which they start on the same cycle over again. The last phase in the cycle of movements of the stripping elements may be carried out in such a way that during the course of it the stripping elements remain out of touch with the tobacco leaves.

When the stripping has been completed in the manner described, the stems are moved along by the conveyor belts, whilst the leaf tops remain gripped between said conveyor belts, and are brought within the range of action of an air stream provided by a blower.

Under the influence of said air stream the stem ends are blown upwards and are inserted between and gripped by another set of cooperating conveyor belts, whereupon the top ends are released by the first set of conveyor belts. Now the practically bare stems are carried along by the second set of conveyor belts, the bottom ends of the stems being gripped between said belts and the top ends with the remaining portion of the blade adhering thereto, dangling vertically downward. The stems are now passed between cooperating sets of stripping elements, which strip the remaining portions of the blades off the stems.

Finally the completely bare stems are deposited on a conveyor belt, which carries them out of the machine, or deposits them in a basket.

Under the first and second sets of conveying belts is arranged a conveyor on which the stripped-off blades are deposited and carried out of the machine.

One form of embodiment of the tobacco stripping machine according to this invention is diagrammatically illustrated in the drawings, in which

Fig. 1 is a top view.

Fig. 2 is a side view.

Fig. 3 is a vertical cross-section.

Fig. 4 is a detail showing a set of cooperating stripping elements.

Fig. 5 is a top view of a modified form of embodiment of the invention, and Fig. 6 is a side elevation of the same.

The machine comprises a feeding-table 1 on which the tobacco leaves are deposited so that the top ends of the leaves rest upon an endless conveyor belt 2, which passes over rollers 3. The endless conveyor belt 2 cooperates with another endless conveyor belt 4, passing over rollers 5.

The cooperating conveyor belts 2 and 4 move intermittently in the direction of the arrows and serve for carrying the tobacco leaves, the tops of which are gripped between their cooperating portions, through the machine, thereby exposing them to the action of the stripping elements 9 and 10 arranged on opposite sides of said cooperating portions of the conveyor belts.

In continuation of the cooperating conveyor belts 2 and 4 another pair of cooperating conveyor belts 13 and 14 is arranged, passing over rollers 15 and 16.

This second set of conveyor belts 13 and 14 begins underneath the end of the stripping elements 9 and 10 and serves for conveying the partly stripped tobacco leaves between another

set of stripping elements 17 and 18, which strip the remaining top part of the blade off the stem. Therefore it is necessary that this second set of conveyor belts 13 and 14 grip the tobacco stems at the bottom ends in such a way that the top ends dangle loosely downward and can thus be exposed to the action of the stripping elements 17 and 18. This is accomplished by means of an air current supplied by a blower 21.

After the leaves have been taken from the table 1 by the conveyor belts 2 and 4, they pass under a circular knife 23 which serves for cutting off the top ends protruding above the level of the belts.

The stripping elements (Fig. 4) comprise sets of combs 24 and 67, and brushes 25, 26 and 27 mounted on beams 28 and 29. The combs consist of steel pins. The relative distance of these pins as well as their cross section depends on the quality of the tobacco to be stripped. Thus the distance between the teeth of the combs 67, as well as their cross sectional area, is greater than those of the combs 24. The brushes are preferably made of flat steel strips, but any other equally resilient material may be used for the purpose. The stiffness of the brushes and the resilience of the material of which they are made depend also on the kind of tobacco which is to be stripped in the machine.

The length of the steel bristles decreases gradually from the first to the last group of stripping elements. For instance the steel bristles of the brush 25 are longer than those of the brush 26 and so on. The distance between the individual bristles of the brushes 25, and their cross sectional area, is greater than those of the brushes 26, and so on.

To every machine belong several reserve sets of combs and brushes, each set being used for a different kind of tobacco.

The beams of brush holders 28, 29, on which the combs and the brushes are mounted, are secured to sets of rods 30 and 31, respectively, said rods being resiliently mounted in frames 32 and 33, respectively, and held therein by springs 34.

The frames 32 and 33 are pivotally secured to pairs of cranks 35 and 36, said cranks being mounted on shafts 38 and 55, respectively, journaled in bearings 37.

On the rods 30 and 31 are mounted stop members 40, which cooperate with fixed guides 49, in such a way that they limit the movement towards each other of the rods 30 and 31. The movement of the frame 32 is obtained by means of a motor 39, a pulley 40 on the motor shaft, a driving belt 41 and a pulley 42 mounted on one of the shafts 38. The cranks 35 rotate clockwise.

The movement of the frame 33 is obtained by the rotation of the pulley 40 on the shaft of the motor 39, the belt 44, the pulley 45, the belt 46, the pulley 54 mounted on one of the shafts 55. The cranks 36 rotate anti-clockwise.

In accordance with this driving mechanism, the brushes mounted respectively on the beams 28 and 29 perform a cycle of movements indicated by dash-dot lines in Fig. 3.

Starting from the position illustrated in the drawings, the previously mentioned cycle of movements takes place as follows.

The cranks turn with constant angular speed. The brushes secured to the beams move upward and inward in a semi-circle in the direction indicated by the arrows. At the moment when the cranks have reached their top position the stops 48 come in contact with the respective guides 49.

Now, as the cranks continue to revolve, carrying along the frames, the guides 49 prevent that the rods follow the circular path of the frames and cause the rods to move vertically downward, while being pushed back into the frames against the spring 34 in such a way that the brushes secured to the end of them follow a straight vertical downward path. It will be observed that the speed of the brushes when following this downward vertical path is not uniform, but, according to the constant angular velocity of the cranks, increases from an initial vertical speed of zero to a maximum vertical speed when the cranks occupy the horizontal position, said vertical speed decreasing again gradually to zero, when the cranks move from their horizontal position to their vertically downward pointing position.

When the vertical motion of the brushes secured to the end of the rods is completed, the brushes are abruptly withdrawn following the movement of the rods, which are gradually pushed out of the frames by the spring 34, until the stops 48 are again pulled away from the guides 49.

In some kinds of tobacco the stem at the top part of the leaf is so tender that it does not impair the quality of the blade if it is left in. If that is the case, the blade need not be stripped off the top part of the stem in a second operation, but the top part of the leaf can simply be cut off. The machine need not, in that case, comprise a second set of conveying belts 13 and 14, a blower 21, and a second stripping device 17 and 18. In their place a circular knife 56 for cutting off the top parts of the leaves may be provided, as shown in Figs. 5 and 6.

The intermittent drive of the conveyors, resulting in the hereinbefore mentioned feature that the tobacco leaves remain stationary while exposed to the action of the stripping elements, may be effected by such means as shown in Figs. 2 and 6, viz. a Geneva driver 59 and driven wheel 60, connected by a belt 58 to a pulley 61 over which the conveyor belt 2 passes, as will be obvious from the drawing, or by any other equivalent device. The conveyor belts are pressed against each other, as shown, for instance, in Fig. 3, by means of rollers 62 rotatably carried by pins 63 in plungers 64 slidably guided in cylinders 65 and forced against the belts by springs 66.

A conveyor 57 arranged underneath the conveyor belts and driven by any convenient means in an obvious manner serves for carrying the stripped leaves dropping thereon out of the machine.

While I have thus described and illustrated one preferred form of embodiment of the apparatus for carrying out this new method, it will be understood that I do not wish to be limited to the mechanical details thereof and may resort to such modifications and alterations as come within the scope of the claims hereto appended.

I claim:

1. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a conveyor for said leaves and a set of combs and brushes successively arranged along said conveyor and adapted to strip the leaves from their top ends in a downward direction towards their stem ends.

2. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a conveyor for said leaves, means for intermittently driving said conveyor and a set of combs and brushes arranged along said conveyor and adapted to strip the leaves from their top

ends in a downward direction towards their stem ends.

3. In a device for mechanically stripping the blades of tobacco leaves off their stems, a conveyor for said leaves and a set of combs arranged along said conveyor and adapted to strip the leaves, said combs having teeth of gradually decreasing cross-sectional dimensions.

4. In a device for mechanically stripping the blades of tobacco leaves off their stems, a conveyor for said leaves and a set of combs arranged along said conveyor and adapted to strip the leaves, the relative distance between the teeth of said combs varying according to the properties of the tobacco to be stripped.

5. In a device for mechanically stripping the blades of tobacco leaves off their stems, a conveyor for said leaves and a set of brushes arranged along said conveyor and adapted to strip the leaves, said brushes having bristles of gradually decreasing stiffness.

6. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a conveyor adapted to grip the top ends of said leaves, a device for driving said conveyor, a set of combs and brushes arranged along said conveyor, and means for driving said combs and brushes to move in one movement down from said top ends to the stem ends of said leaves so as to strip the blades off said stems.

7. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a primary conveyor adapted to grip the top ends of said leaves, a device for driving said conveyor, a set of stripping means arranged along said conveyor, means for driving said stripping means to move in one movement down from said top ends to the stem ends of said leaves so as to strip blades off said stems, a second conveyor, and means for feeding partly stripped tobacco leaves from said primary conveyor to said second conveyor shortly before being released by said primary conveyor, to be seized by said second conveyor at their stem ends.

8. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a primary conveyor consisting of two parallel endless belts pressed against each other, adapted to grip said tobacco leaves, a device for driving said conveyor, a set of stripping means arranged along said belts, means for driving said stripping means to move directly down from the top ends to the stem ends of said leaves and strip blades off said stems, and a second conveyor consisting of two parallel endless belts pressed against each other and adapted to grip the stem ends of stripped tobacco leaves shortly before they are released by said primary conveyor.

9. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a tobacco leaf feeding device, a conveyor adapted to grip the top ends of said tobacco leaves, means for driving said conveyor, a set of combs and brushes, the teeth and bristles of which are of different cross-sections, stiffness and distance from each other, and means for driving said combs and brushes to move directly down from said top ends to the stem ends of said leaves and strip blades off said stems.

10. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a conveyor adapted to grip the top ends of said leaves, a set of combs and brushes mounted on beams arranged on opposite sides of said conveyor, said beams being secured to rods

resiliently mounted on rotatable frames, stops on said rods and guides for limiting the stroke of said rods in a direction toward said conveyor.

11. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a feeding device for feeding the tobacco leaves to a conveyor by which the top ends of the leaves are gripped and from which the leaves depend fringe-like, means for driving said conveyor intermittently, sets of cooperating stripping elements arranged on opposite sides of said conveyor, means for driving said stripping elements in such a way that they cooperate in stripping the blades off the stems along said stems, a second conveyor arranged in continuation of the first conveyor, sets of cooperating stripping elements arranged on opposite sides of said second conveyor, means for feeding the tobacco leaves into the second conveyor, shortly before they are released by the first conveyor, in such a way that each leaf is gripped by the second conveyor at the extremity of the stem opposite to that at which it has been held by the first conveyor, and a conveyor for carrying the stripped-off blades out of the machine.

12. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a feeding table for feeding the tobacco leaves to a conveyor, two endless conveyor belts between which the top ends of the leaves are gripped and from which the leaves depend fringe-like, means for driving said conveyor belts intermittently, sets of steel combs and steel brushes mounted on beams arranged on opposite sides of said conveyor, said beams being secured to rods resiliently mounted on rotatable frames, stops on said rods cooperating with guides for limiting the stroke of said rods in a horizontal direction, a motor cooperating with driving belts and pulleys for imparting rotation in opposite directions to each of said pairs of rotatable frames, a second set of cooperating endless conveying belts arranged in continuation of the first set of conveying belts, sets of steel combs and steel brushes mounted on beams arranged on opposite sides of said second conveyor and driven in the same way as the first mentioned steel combs and steel brushes, a blower for bending the stems into engagement with the second set of conveyor belts shortly before the top ends of the leaves are released by the first set of conveyor belts, and a conveyor for conveying the stripped-off blades out of the machine.

13. In a device for mechanically stripping the blades of tobacco leaves off their stems, the combination of a feeding table for feeding the tobacco leaves to a conveyor, two endless conveyor belts between which the top-ends of the leaves are inserted and from which the leaves depend fringe-like, means for driving said conveyor belts intermittently, sets of steel combs and steel brushes mounted on beams arranged on opposite sides of said conveyor, said beams being secured to rods resiliently mounted in rotatable frames, stops on said rods cooperating with guides for limiting the stroke of said rods in a horizontal direction, a motor cooperating with driving belts and pulleys for imparting rotation in opposite directions to each of said pairs of rotatable frames, means for cutting off the top parts of the leaves, and a conveyor for conveying the stripped-off blades out of the machine.

14. In a device for mechanically stripping tobacco-leaves, the combination of a conveyor adapted to grip the tip-ends of said leaves, a se-

ries of stripping means each unit of which is adapted to strip in one movement from the tip-ends to the butt-ends of said leaves, and means for moving said conveyor intermittently along said series of stripping means.

15. In a device for mechanically stripping tobacco-leaves, the combination of a conveyor comprising two parallel endless belts pressed against each other so as to grip said tobacco-leaves between them, means for driving said conveyor, a series of stripping means arranged along said conveyor and means for actuating each unit of said series so as to strip in one movement from the tip-ends to the butt-ends of said leaves.

16. In a device for mechanically stripping tobacco-leaves, the combination of a conveyor adapted to grip the tip-ends of said leaves, a series of stripping means arranged along said conveyor, swinging frames carrying said stripping means, rods resiliently mounted in said frames, stops on said rods, and guides for engaging said stops so as to limit the stroke of said rods in the direction toward said conveyor.

17. In a device for mechanically stripping tobacco-leaves, the combination of a conveyor adapted to grip the tip-ends of said leaves, a series of stripping elements arranged along said conveyor, and means for imparting to said stripping elements a movement in a cycle which includes a vertical direction along said leaves from their tip-ends to below their butt-ends, and a substantially semi-circular direction from the lowermost to the uppermost position of said stripping means.

18. In a device for mechanically stripping tobacco-leaves, the combination of a conveyor adapted to grip the tip-ends of said leaves, means for driving said conveyor, a set of combs arranged along said conveyor, and means for actuating said combs to strip in one movement from the tip-ends to the butt-ends of said leaves.

19. In a device for mechanically stripping tobacco-leaves, the combination of a conveyor adapted to grip the tip-ends of said leaves, means for driving said conveyor, a set of brushes arranged along said conveyor, and means for actuating said brushes to strip in one movement from the tip-ends to the butt-ends of said leaves.

20. In a device for mechanically stripping tobacco-leaves, the combination of a conveyor adapted to grip the tip-ends of said leaves, a set of stripping means having pointed elements adapted to penetrate said leaves and to strip in one downward movement from the tip-ends to the butt-ends of said leaves, and means for moving said conveyor intermittently along said stripping means.

21. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed elements adapted to penetrate said leaves, and means for moving said stripping member in one downward movement from the tip ends to the butt ends of said leaves.

22. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed elements adapted to penetrate said leaves, means for moving said stripping member in one downward movement from the tip ends to the butt ends of said leaves, and means for conveying said leaves to said stripping member.

23. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed

elements adapted to penetrate said leaves, means for moving said stripping member in one downward movement from the tip ends to the butt ends of said leaves, and means for subsequently subjecting the tip ends of said leaves to stripping in a direction from said butt ends to said tip ends.

24. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed elements adapted to penetrate said leaves, means for moving said stripping member in one downward movement from the tip ends to the butt ends of said leaves, and means for subsequently cutting off the remaining unstripped tips of said leaves.

25. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed elements adapted to penetrate said leaves, and means for moving said stripping member downwards beginning near the tip ends and ending at the butt ends of said leaves.

26. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed elements adapted to penetrate said leaves, means for moving said stripping member downwards beginning near the tip ends and ending at the butt ends of said leaves, and means for conveying said leaves to said stripping member.

27. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed elements adapted to penetrate said leaves, means for moving said stripping member downwards beginning near the tip ends and ending at the butt ends of said leaves, and means for subsequently subjecting the tip ends of said leaves to stripping in a direction from the butt ends to the tip ends of said leaves.

28. In a device for mechanically stripping tobacco leaves, means adapted to grip the tip ends of said leaves, a stripping member having pointed elements adapted to penetrate said leaves, means for moving said stripping member downwards beginning near the tip ends and ending at the butt ends of said leaves, and means for subsequently cutting off the remaining unstripped tips of said leaves.

29. A mass-production method of stripping tobacco leaves, consisting in suspending the leaves by their tip ends so as to depend freely, and mechanically stripping the lateral veins of the leaves from the stems by pulling action at substantially the entire length of each leaf in a direction parallel to the stem and from the tip ends to the butt ends of said leaves, removing the lamina from the stem in such a manner that the severed lamina is hanging down substantially parallel to the stem, so as to assist by its own weight in exerting a downward pull upon the lower portion of the lamina still adhering to the stem.

30. A mass-production method of stripping tobacco leaves, consisting in suspending the leaves by their tip ends so as to depend freely in a continuous fringe, conveying the fringe into the path of stripping means adapted to act on the same and mechanically splitting the lateral veins of the leaves from the stems by pulling action at substantially the entire length of each leaf in a direction parallel to the stem and from the tip ends to the butt ends of said leaves, removing the

lamina from the stem in such a manner that the severed lamina is hanging down substantially parallel to the stem, so as to assist by its own weight in exerting a downward pull upon the lower portion of the lamina still adhering to the stem.

31. A mass-production method of stripping tobacco leaves, consisting in suspending the leaves by their tip ends so as to depend freely, conveying the suspended leaves intermittently to stripping means located in their path, and causing said stripping means to act on said leaves during the intervals of their conveyance, so as to split the lateral veins of the leaves from the stems by pulling action at substantially the entire length of each leaf in a direction parallel to the stem and from the tip ends to the butt ends of said leaves, removing the lamina from the stem in such a manner that the severed lamina is hanging down substantially parallel to the stem, so as to assist by its own weight in exerting a downward pull upon the lower portion of the lamina still adhering to the stem.

32. A mass-production method of stripping tobacco leaves, consisting in suspending the leaves by their tip ends so as to depend freely, mechanically stripping the lateral veins of the leaves from the stems by pulling action at substantially the entire length of each leaf in a direction parallel to the stem and from the tip ends to the butt ends of said leaves, removing the lamina from the stem in such a manner that the severed lamina is hanging down substantially parallel to the stem, so as to assist by its own weight in exerting a downward pull upon the lower portion of the lamina still adhering to the stem, and subsequently stripping off the small remainder of lamina from the tips previously inaccessible to the stripping action.

33. A mass-production method of stripping tobacco leaves, consisting in suspending the leaves by their tip ends so as to depend freely, mechanically splitting the lateral veins of the leaves from the stems by pulling action at substantially the entire length of each leaf in a direction parallel to the stem and from the tip ends to the butt ends of said leaves, removing the lamina from the stem in such a manner that the severed lamina is hanging down substantially parallel to the stem, so as to assist by its own weight in exerting a downward pull upon the lower portion of the lamina still adhering to the stem, and subsequently cutting off the remaining tips of said leaves, including the stem portions embraced thereby.

34. A mass production method of stripping tobacco-leaves, consisting in suspending the leaves by their tip ends so as to depend freely, and mechanically splitting the lateral veins of the leaves from the stems by pulling action at substantially the entire length of each leaf in a direction parallel to the stem and from the tip ends to the butt ends of said leaves, removing the lamina from the stem in such a manner that the severed lamina is hanging down substantially parallel to the stem, so as to assist by its own weight in exerting a downward pull upon the lower portion of the lamina still adhering to the stem, said splitting operations being effected by stripping movements each proceeding along substantially the entire length of the leaves.

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