Jan. 2, 1945. A. STERNBERG 2,366,293

HAND TOOLING DEVICE FOR USING SIZED GOLD AND OTHER DECORATIVE LEAF

Filed July 1, 1943 3 Sheets-Sheet 1

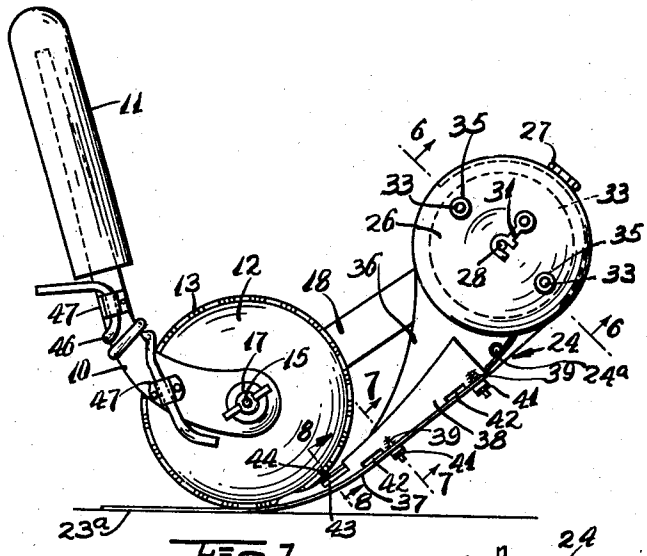


Fig. 1.

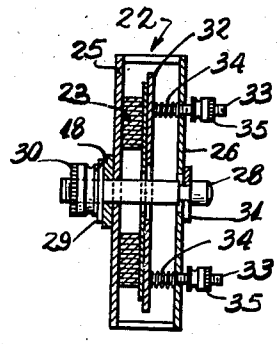


Fig. 6.

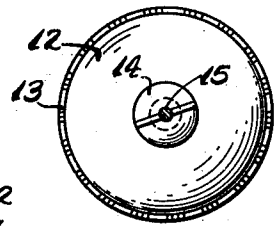


Fig. 5.

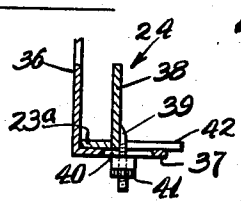


Fig. 7.

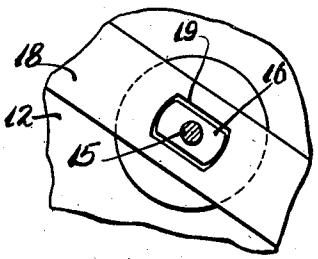


Fig. 4.

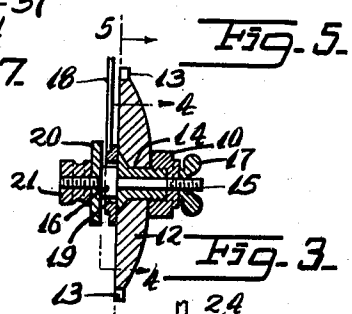


Fig. 3.

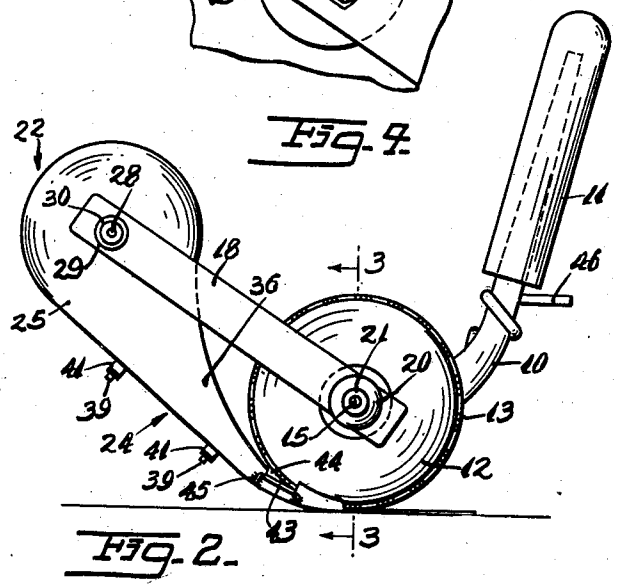


Fig. 2.

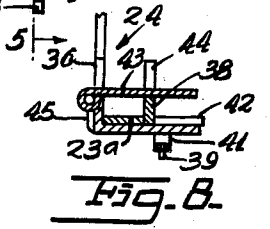


Fig. 8.

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HAND TOOLING DEVICE FOR USING SIZED GOLD AND OTHER DECORATIVE LEAF

Filed July 1, 1943 3 Sheets-Sheet 2

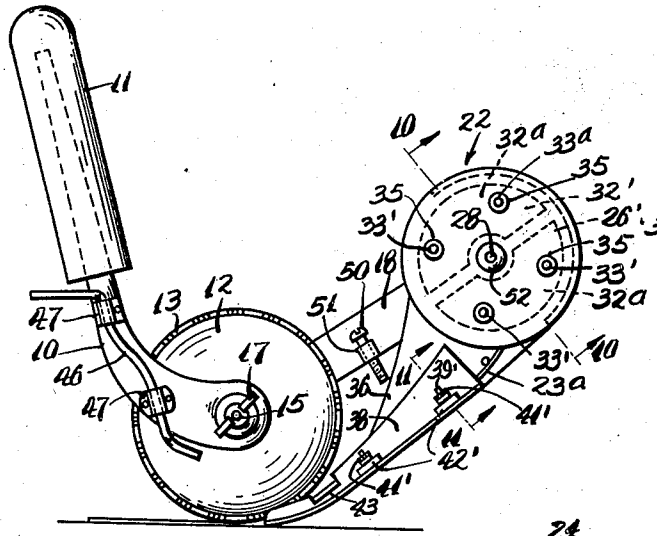


Fig. 9.

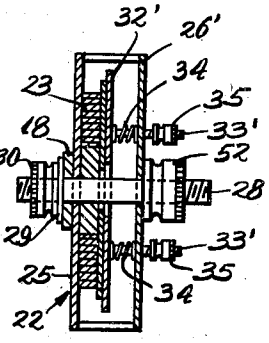


Fig. 10.

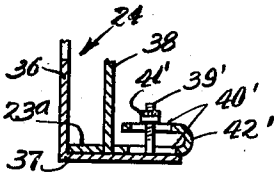


Fig. 11.

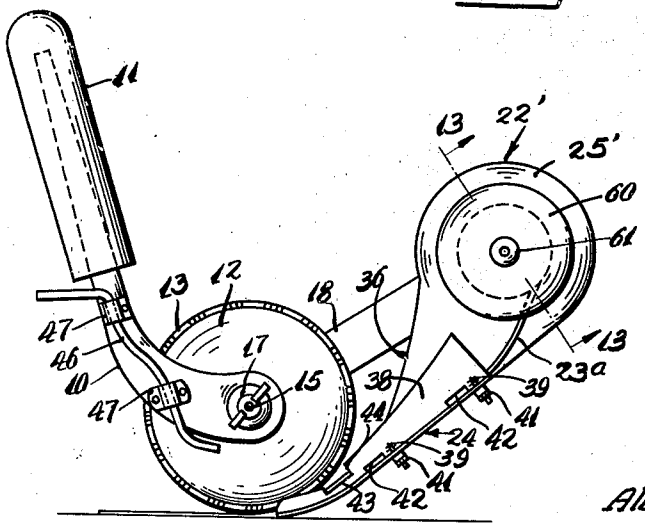


Fig. 12.

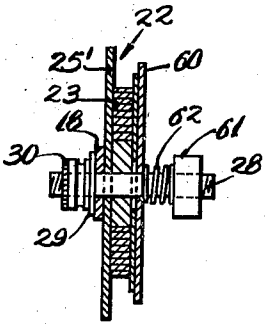


Fig. 13.

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HAND TOOLING DEVICE FOR USING SIZED GOLD AND OTHER DECORATIVE LEAF

Filed July 1, 1943 3 Sheets-Sheet 3

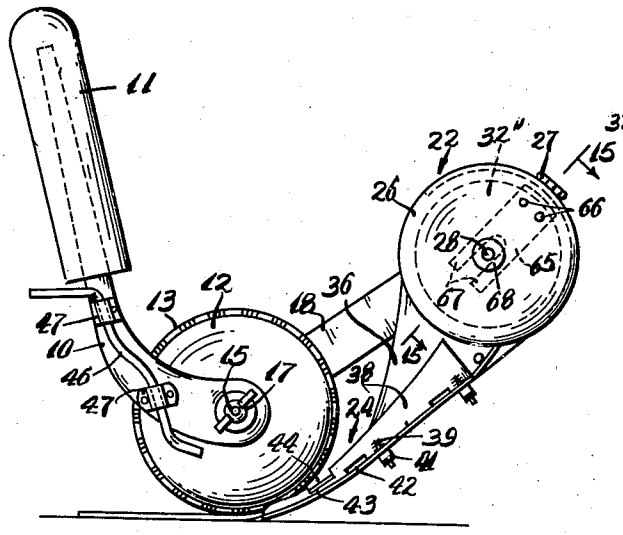


Fig. 14.

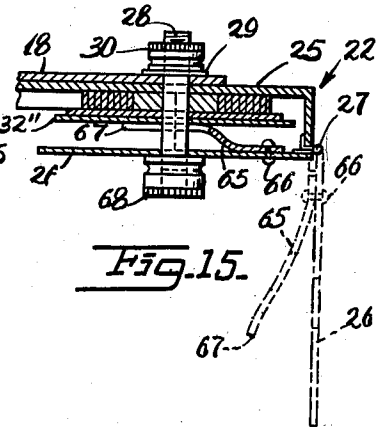


Fig. 15.

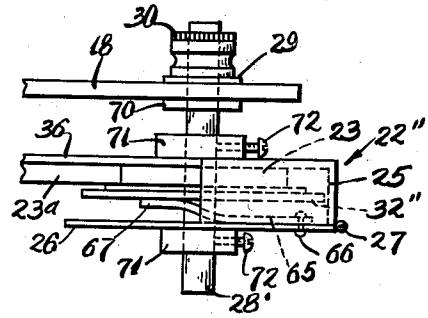


Fig. 17.

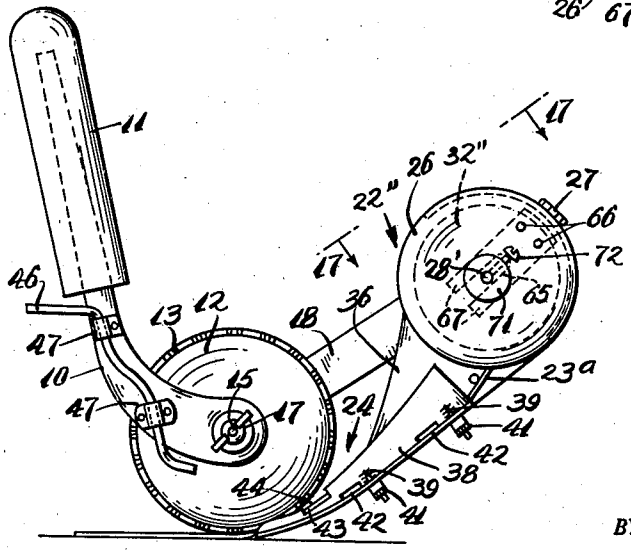


Fig. 16.

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Patented Jan. 2, 1945

2,366,293

UNITED STATES PATENT OFFICE

2,366,293

HAND TOOLING DEVICE FOR USING SIZED GOLD AND OTHER DECORATIVE LEAF

Albert Sternberg, New York, N. Y.

Application July 1, 1943, Serial No. 493,018

6 Claims. (Cl. 41—7)

This invention relates to new and useful improvements in a hand tooling device for using sized gold and other decorative leaf.

More specifically, the invention proposes the construction of a hand tooling device characterized by a stamping die rotatively mounted upon a support member provided with a means for heating the stamping die to cause the application of leaf material to a surface as the heated stamping die is rolled over a surface with the leaf material therebetween.

Another object of the invention proposes a container for a supply of ribbon leaf material mounted upon the support member and formed with a means for guiding the ribbon leaf material beneath the heated stamping die in a manner to cause the material to be continuously fed to the stamping die as it is rolled.

Still another object of this invention proposes the provision of a means whereby the container and guiding means may be adjusted to accommodate ribbon leaf material of different widths.

A further object of this invention proposes mounting the supply container upon the top end of a support bar which extends upwards at an angle from the support member and which is connected with the support member in a novel manner so as to permit a slight movement of the support bar relative to the support member so as to position the bottom end of the guide means for the ribbon material beneath the stamping die.

It is a further object of this invention to construct a hand tooling device for using sized gold and other decorative leaf, which is simple and durable and may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a front elevational view of a hand tooling device constructed in accordance with this invention.

Figure 2 is a rear elevational view of Fig. 1.

Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is an enlarged vertical sectional view taken on the line 4—4 of Fig. 3.

Fig. 5 is a vertical sectional view taken on the line 5—5 of Fig. 3.

Fig. 6 is a sectional view taken on the line 6—6 of Fig. 1.

Fig. 7 is a sectional view taken on the line 7—7 of Fig. 1.

Fig. 8 is a sectional view taken on the line 8—8 of Fig. 1.

Fig. 9 is a view similar to Fig. 1, but illustrating a modification of the invention.

Fig. 10 is a sectional view taken on the line 10—10 of Fig. 9.

Fig. 11 is a sectional view taken on the line 11—11 of Fig. 9.

Fig. 12 is a view similar to Fig. 1, but illustrating a further modification of the invention.

Fig. 13 is a sectional view taken on the line 13—13 of Fig. 12.

Fig. 14 is another view similar to Fig. 1, but illustrating a still further modification of the invention.

Fig. 15 is a sectional view taken on the line 15—15 of Fig. 14.

Fig. 16 is still another view similar to Fig. 1, but illustrating still another modification of the invention.

Fig. 17 is a partial plan view looking in the direction of the line 17—17 of Fig. 16.

The hand tooling device for using sized gold and other decorative leaf, according to this invention, includes a support member 10 of metal and provided at its top with a wooden handle 11. A stamping die wheel 12 is mounted upon the bottom of the support member 10 and has its periphery 13 provided with a design to be imparted to the surface upon which the device is being used. The stamping die wheel 12 is rotatively supported upon a stationary stud 14. The stud 14 is passed freely through a central opening in the die wheel 12 and threadedly engaged with the bottom end of the support member 10, see Fig. 3. It is to be understood that there is sufficient play between contacting surfaces of the support member 10, the die wheel 12 and the stud 14 to permit the die wheel to freely rotate.

A bolt 15 is extended concentrically through the stud 14, and is formed intermediate of its ends with an oblong head 16. The head 16 bears against one end of the stud 14. The opposite end of the bolt 15 is provided with a thumb nut 17 which is adapted to be tightened against the adjacent face of the support member 10 for holding the bolt 15 and more specifically, the oblong head 16 in various turned positions.

A support bar 18 extends upwards at an angle

from the bolt 15. The bottom end of the support bar 18 is formed with an elongated opening 19 which surrounds the oblong head 16. Fastening means is provided for releasably holding the support bar 18 on the oblong head 16. This fastening means comprises a washer 20 engaged upon the end of the bolt 15 and bearing against the free face of the oblong head 16. A nut 21 is then threadedly engaged upon the free end of the bolt 15.

From an inspection of Fig. 4 it will be noted that the elongated opening 19 is of a slightly greater size than the oblong head 16 permitting a free movement of the support bar 18 relative to the oblong head 16. This movement will be restricted by the oblong head 16 striking the sides of the elongated opening 19. Furthermore, it will be clearly understood that rotating the bolt 15 to various positions, the position of the oblong head 16 will be shifted to control the angular position at which the support bar will be directed upwards.

A supply container 22 for a roll of ribbon leaf material 23 is mounted upon the top end of the support bar 18. The supply container 22 is formed with a guide web portion 24 and a guide pin 24a, for directing a web 23a of the roll of leaf material 23 into position beneath the stamping die wheel 12.

The supply container 22 is characterized by a container body 25 having an open side closed by a cover plate 26. The cover plate 26 is supported by a hinge 27 upon the container body 25 to be swung to an open or a closed position. A rod 28 is extended concentrically through the container body 25 and has an intermediate portion securely welded to the container body 25. One end of the rod 28 is extended freely through an opening formed on the top end of the support bar 18. A washer 29 and nut 30 are engaged upon the end of the rod 28 extended through the opening in the support bar 18 for rotatively supporting the supply container 22 upon the top end of the support bar 18.

The roll 23 is engaged upon the stud 28 within the container body 25 and the cover plate 26 is swung to a closed position. A catch member 31 is pivotally supported upon the cover plate 26 and is engageable with a reduced portion of the rod 28 for releasably locking the cover plate in a closed position.

A floating plate 32 is mounted upon the inner face of the cover plate 26 and is adapted to bear against the face of the roll 23 in the closed position of the cover plate 26 regardless of the thickness of the roll 23. This floating plate 32 is of metal and formed with a pair of diametrically opposite studs 33 which pass freely through complementary openings formed in the cover plate 26. Expansion springs 34 are concentrically mounted upon the studs 33 and operate between the adjacent faces of the floating plate 32 and the cover plate 26 for resiliently urging the floating plate 32 into a position in which it bears against the side of the roll 23. Nuts 35 are threadedly engaged upon the free ends of the studs 33 merely to prevent the studs 33 from becoming disengaged from their respective openings in the open condition of the cover plate 26.

The guide web portion 24 includes an integral vertical wall extension 36 from the container body 25 which extends downwards to a position adjacent the rear face of the stamping die 12. The bottom edge of the vertical wall 36 continues into a horizontal wall 37 upon which the web 23a from the roll 23 is extended. A wall 38 extends parallel to the vertical wall 36 and means is provided for adjustably mounting the wall 38 on the horizontal wall 37 for adjusting the space between the walls 36 and 38 to accommodate ribbons of different thickness.

The adjustable support for the wall 38 comprises screws 39 welded to the outer face of the wall 38 and extended through elongated slots 40 formed in the horizontal wall 37 permitting the wall 38 to be moved away and towards the vertical wall 36. Nuts 41 are threadedly engaged upon the screws 39 and are adapted to be tightened against the bottom face of the horizontal wall 37 for locking the wall 38 in various adjusted positions. The bottom edge of the wall 38 is formed with outwardly extending lugs 42 which engage the top face of the horizontal wall 37 merely to assist in maintaining the wall 38 in a vertical position parallel to the vertical wall 36.

Adjacent the bottom end of the guide web portion 24 a means is provided for closing the open top to retain the web 23a in position therein. This means comprises a plate 43 disposed in cutouts 44 formed in the top edge of the walls 36 and 38. This plate 43 has one edge curled around the intermediate arm of a U-shaped member 45. The U-shaped member is inverted and has its free arms extended along and welded to the outer face of the vertical wall 36. The plate 43 may be swung into an open position when the supply container 22 is pivoted to a position in which the guide web portion 24 will be spaced from the die stamping wheel 12 for properly engaging the web 23a into position between the walls 36 and 38.

A straight pipe 46 is mounted upon the side of the support member 10 by means of spaced brackets 47. The top end of the pipe 46 is bent away from the support member 10 to be connected with a supply of illuminating gas by means of a rubber or similar flexible hose, not shown on the drawings. The bottom end of the pipe 46 is bent to be directed against the side of the stamping die wheel 12. Gas discharging from the bottom end of the pipe 46 is adapted to be lit to supply the required heat to heat the stamping die wheel 12.

The operation of the device is as follows:

The cover plate 26 of the supply container 22 is pivoted to an open position. A roll of the desired metal leaf 23 is engaged upon the rod 28 and the cover plate 26 is pivoted to its closed position and maintained in its closed position by engaging the locking member 31 with the reduced portion of the stud 28.

A web 23a is then drawn from the roll 23 and engaged between the walls 36 and 38 to be fed into position beneath the stamping die wheel 12 by means of the guide web portion 24.

The supply of illuminating gas is then turned on, and the gas which discharges from the end of the pipe 46 is lit to heat the stamping die wheel 12. When the wheel becomes hot, the handle 11 is gripped and the stamping die wheel 12 is rolled over the surface to which the design is to be imparted. Rolling the wheel 12 will continuously feed the web 23a from the roll 23 continuously supplying the periphery of the stamping die wheel 12 with fresh metallic leaf material.

In the modification of the invention shown in Figs. 9 to 11, the construction of the hand tooling device is similar to that previously described, except for the provision of a means for limiting pivoting of the guide web portion 24 towards the stamping die wheel 12. This means comprises a

screw 50 threadedly engaged through a boss 51 formed on the support bar 18. The bottom end of the screw 50 is adapted to strike the top edge of the vertical wall 36 of the guide web portion 24.

Also, the cover plate 26' is free of the supply container body 25 and provided with a slightly different means for holding it in its closed position across the open side of the container body 25. In this form of the invention the free end of the stud is extended concentrically through the cover plate 26' and is adapted to threadedly receive a nut 52. The floating plate 32' is formed of separate arcuate sections 32a, and each of these sections 32a is provided with a pair of supporting studs 33'.

The lugs 42' of the wall 38 are bent into a U-shape and each lug is formed with a superimposed pair of elongated slots 40'. The screws 39' have their bottom ends securely welded to the horizontal wall 37 and are directed vertically upwards through the elongated slots 40' to have the nuts 41' threadedly engaged therewith to lock the wall 38 in desired adjusted positions relative to the wall 36.

In other respects this form of the invention is similar to that previously shown and like reference numerals identify like parts in each of the several views.

The various modified forms of this device are intended for the use of different quality and grade of web material.

In the modification of the invention shown in Figs. 12 and 13 the supply container 22' is characterized by plate 25' from which the vertical wall 36 of the guide web portion 24 extends. The plate 25' is rotatively supported on the stud 28 which carries the roll of ribbon leaf material 23.

A disc 60 is slidably engaged upon the free end of the stud 28 and bears against the free face of the roll 23 for maintaining the roll in position. A collar 61 is also engaged upon the end of the stud 28 and a spring 62 is coaxially mounted upon the stud 28 and operates between the adjacent faces of the disc 60 and the collar 61 for urging the disc 60 into facial contact with the roll 23. The collar 61 frictionally maintains its operative position upon the stud 28 so that the tension of the spring 62 will expend itself against the face of the disc 60.

In other respects this form of the invention is similar to that previously shown and like reference numerals identify like parts in each of the several views.

In Figs. 14 and 15 still another means is illustrated for urging the floating plate 32'' into position against the face of the roll 23. In this form of the invention, a leaf spring 65 has one end securely attached to the inner face of the cover plate 26 by several rivets 66. The free end of the leaf spring 65 is directed away from the inner face of the cover plate 26 and is bifurcated forming fingers 67 which project around the stud 28 and bear against the face of the cover plate 32'' which will in turn be urged against the face of the roll 23.

The cover plate 26 is maintained in a closed position against the action of the leaf spring 65 by means of a nut 68 which threadedly engages the end of the stud 28.

In other respects this form of the invention is similar to that previously shown and like reference numerals identify like parts in each of the several views.

In Figs. 16 and 17 still another modification of the invention is illustrated which is similar to that just previously described except that the supply container 22'' is slidably adjustably mounted upon the stud 28'.

Intermediate of its ends the stud 28' is formed with a flange 70 against which the support bar 18 is adapted to be clamped by means of the nut 30.

The free end of the stud 28' which projects from the flange 70 is slidably extended through the container body 25 and the cover plate 26 of the supply container 22''. Collars 71 are slidably mounted upon the stud 28' upon opposite sides of the supply container 22'' and are adapted to be held in fixed positions upon the stud 28' by means of screws 72. Adjusting the position of the supply container 22'' upon the stud 28' is accomplished by loosening the screws 72 and shifting the collars 71 and supply container 22'' to a new position on the stud 28'. When the desired new position is reached the screws 72 are again tightened for holding the supply container in its new position.

The outer most collar 71 in addition to assisting in holding the supply container 22'' in various fixed positions on the stud 28', also acts to maintain the cover plate 26 in a closed position with relation to the container body 25.

In other respects this form of the invention is similar to that previously shown and like reference numerals identify like parts in each of the several views.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. In a device of the class described having a rotatively supported heated stamping die wheel and a supply container for a ribbon of leaf, a guide web portion for guiding a web of said leaf from said supply container to a position beneath said stamping die wheel, comprising a vertical wall extending from said supply container to a position adjacent said stamping die wheel, a horizontal wall continuing from said vertical wall and along which the web of said leaf extends, a second vertical wall positioned on the free edge of said horizontal wall and cooperating with said first vertical wall and said horizontal wall to form a channel for said leaf, and means adjustably supporting said second vertical wall on said horizontal wall permitting the space between said vertical walls to be adjusted to accommodate leaf of different widths.

2. In a device of the class described having a rotatively supported heated stamping die wheel and a supply container for a ribbon of leaf, a guide web portion for guiding a web of said leaf from said supply container to a position beneath said stamping die wheel, comprising a vertical wall extending from said supply container to a position adjacent said stamping die wheel, a horizontal wall continuing from said vertical wall and along which the web of said leaf extends, a second vertical wall positioned on the free edge of said horizontal wall and cooperating with said first vertical wall and said horizontal wall to form a channel for said leaf, and means adjustably supporting said second vertical wall on said horizontal wall permitting the space between said

vertical walls to be adjusted to accommodate leaf of different widths, comprising spaced screws secured to said latter-mentioned vertical wall and extended through elongated slots formed in said horizontal wall, and nuts threadedly engaged on said screws and adapted to be tightened against the bottom face of said horizontal wall.

3. In a device of the class described having a rotatively supported heated stamping die wheel and a supply container for a ribbon of leaf, a guide web portion for guiding a web of said leaf from said supply container to a position beneath said stamping die wheel, comprising a vertical wall extending from said supply container to a position adjacent said stamping die wheel, a horizontal wall continuing from said vertical wall and along which the web of said leaf extends, a second vertical wall positioned on the free edge of said horizontal wall and cooperating with said first vertical wall and said horizontal wall to form a channel for said leaf, and means adjustably supporting said second vertical wall on said horizontal wall permitting the space between said vertical walls to be adjusted to accommodate leaf of different widths, comprising spaced screws secured to said latter-mentioned vertical wall and extended through elongated slots formed in said horizontal wall, and nuts threadedly engaged on said screws and adapted to be tightened against the bottom face of said horizontal wall, said elongated slots being extended at right angles to said vertical walls permitting said second vertical wall to be moved towards and away from said first vertical wall in the loosened condition of said nuts.

4. In a device of the class described having a rotatively supported heated stamping die wheel and a supply container for a ribbon of leaf, a guide web portion for guiding a web of said leaf from said supply container to a position beneath said stamping die wheel, comprising a vertical wall extending from said supply container to a position adjacent said stamping die wheel, a horizontal wall continuing from said vertical wall and along which the web of said leaf extends, a second vertical wall positioned on the free edge of said horizontal wall and cooperating with said first vertical wall and said horizontal wall to form a channel for said leaf, and means adjustably supporting said second vertical wall on said horizontal wall permitting the space between said vertical walls to be adjusted to accommodate leaf of different widths, and means for closing the open top of said channel adjacent said stamping die wheel.

5. In a device of the class described having a rotatively supported heated stamping die wheel and a supply container for a ribbon of leaf, a guide web portion for guiding a web of said leaf from said supply container to a position beneath said stamping die wheel, comprising a vertical wall extending from said supply container to a position adjacent said stamping die wheel, a horizontal wall continuing from said vertical wall and along which the web of said leaf extends, a second vertical wall positioned on the free edge of said horizontal wall and cooperating with said first vertical wall and said horizontal wall to form a channel for said leaf, and means adjustably supporting said second vertical wall on said horizontal wall permitting the space between said vertical walls to be adjusted to accommodate leaf of different widths, and means for closing the open top of said channel adjacent said stamping die wheel, comprising a plate extended between cutouts formed in the top edges of said vertical walls, and means pivotally supporting one end of said plate on said first vertical wall to be movable to an inoperative position when positioning said leaf in said channel.

6. In a device of the class described having a rotatively supported heated stamping die wheel and a supply container for a ribbon of leaf, a guide web portion for guiding a web of said leaf from said supply container to a position beneath said stamping die wheel, comprising a vertical wall extending from said supply container to a position adjacent said stamping die wheel, a horizontal wall continuing from said vertical wall and along which the web of said leaf extends, a second vertical wall positioned on the free edge of said horizontal wall and cooperating with said first vertical wall and said horizontal wall to form a channel for said leaf, and means adjustably supporting said second vertical wall on said horizontal wall permitting the space between said vertical walls to be adjusted to accommodate leaf of different widths, and means for closing the open top of said channel adjacent said stamping die wheel, comprising a plate extended between cutouts formed in the top edges of said vertical walls, and means pivotally supporting one end of said plate on said first vertical wall to be movable to an inoperative position when positioning said leaf in said channel, said plate being of a length to extend between said vertical walls in all their adjusted positions.

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