

(No Model.)

4 Sheets—Sheet 1.

J. DELA MAR.

COMBINED CIGAR ROLLING TABLE AND WRAPPER CUTTER.

No. 547,557.

Patented Oct. 8, 1895.

Fig. 1

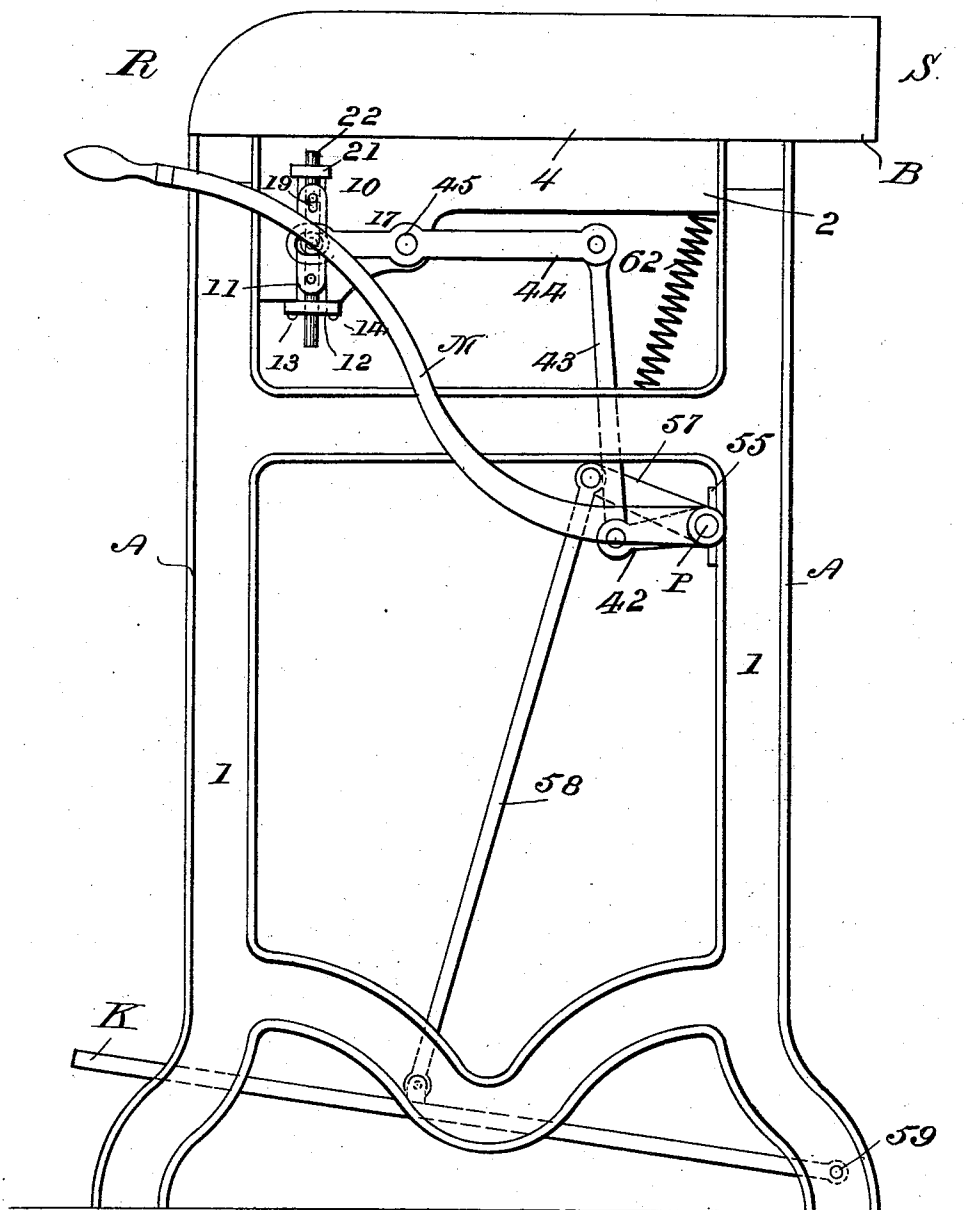
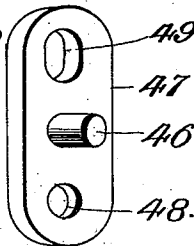


Fig. 10



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(No Model.)

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Fig. 3

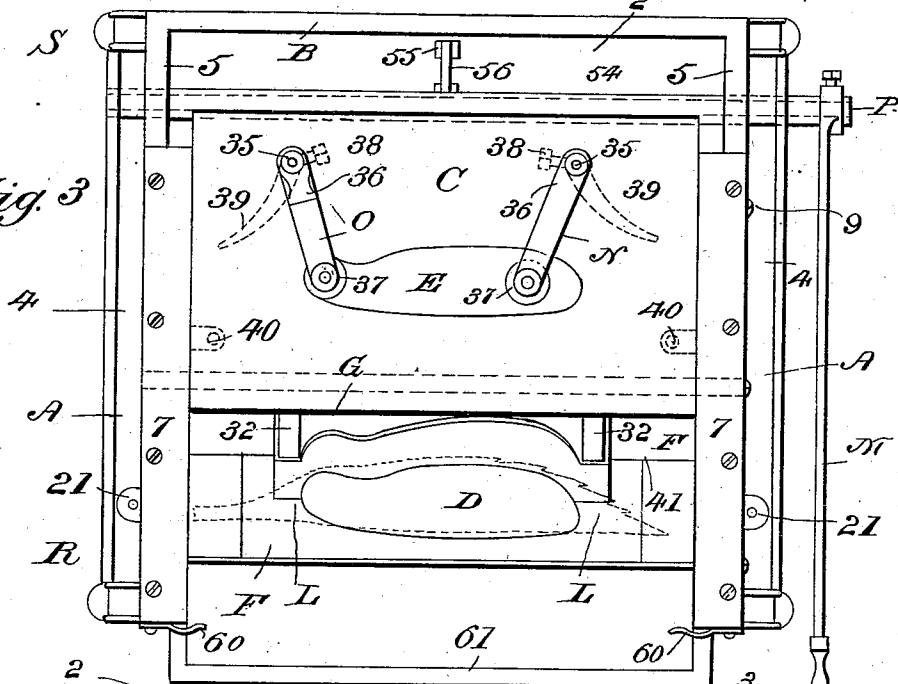
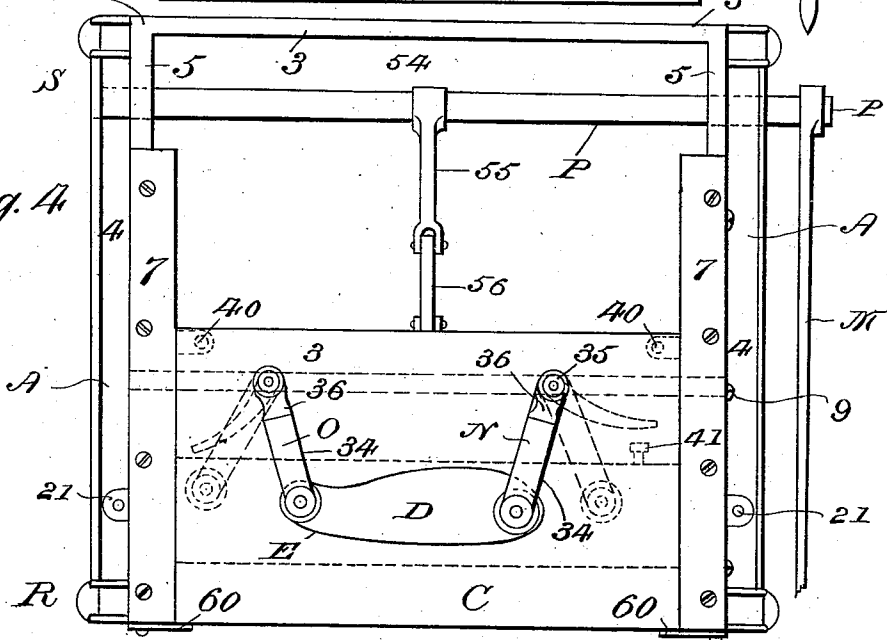


Fig. 4



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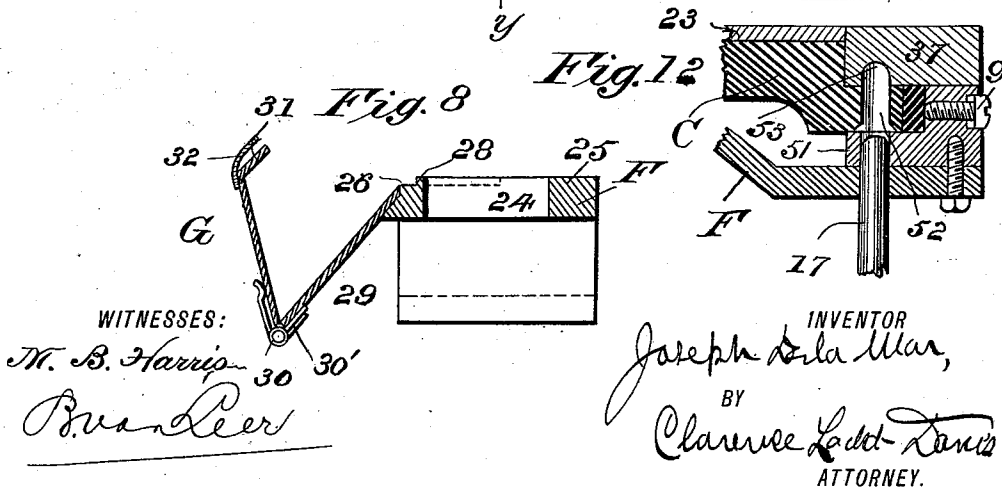
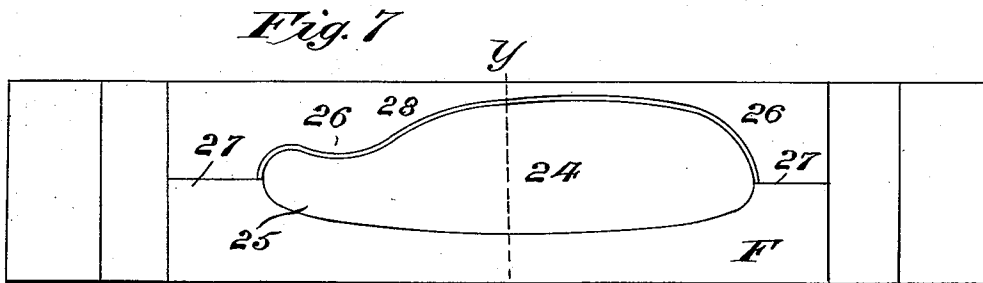
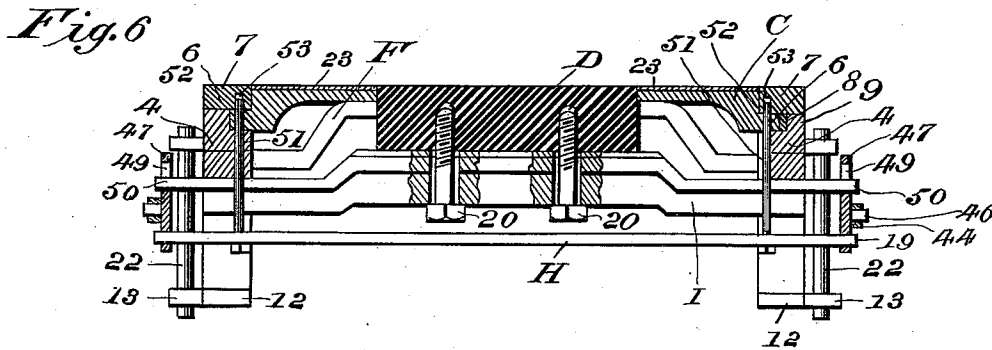
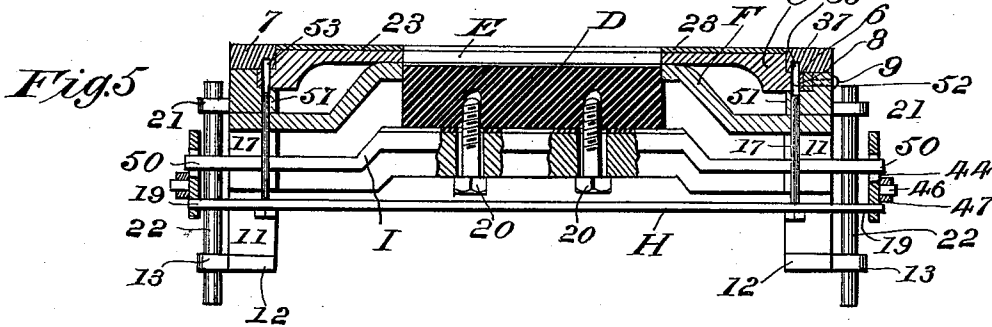
4 Sheets—Sheet 4.

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COMBINED CIGAR ROLLING TABLE AND WRAPPER CUTTER.

No. 547,557.

Patented Oct. 8, 1895.



UNITED STATES PATENT OFFICE.

JOSEPH DELA MAR, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
BERNARD VAN LEER, OF SAME PLACE.

COMBINED CIGAR-ROLLING TABLE AND WRAPPER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 547,557, dated October 8, 1895.

Application filed July 8, 1895. Serial No. 555,336. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH DELA MAR, a citizen of the United States of America, residing in the city and county of New York, in the State of New York, have invented certain new and useful Improvements in a Combined Cigar-Rolling Table and Wrapper-Cutter, of which the following is a specification, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a device of the type mentioned of a simple and cheap form of construction capable of being operated by unskilled and cheap labor, by the use of which the tobacco-leaf may be quickly and easily cut into the required shape to form a cigar-wrapper and the cut wrapper so formed be held in position upon the wrapping-surface during the operation of rolling such wrapper around the bunch of filler-tobacco.

The machine of this invention is composed in substance of a moving wrapping-table, a female die carried by the wrapping-table, a male die adapted to enter and pass up through the female die when brought into registry therewith, a leaf support or table below the wrapping-table, means for holding the leaf to be cut in position upon the leaf-support while the wrapping-table is being moved, so as to bring the female die into registry with the male die, a clamp or clamps for holding the cut wrapper in position upon the wrapping-surface after the same is carried up through the female die, mechanism for automatically bringing the clamp or clamps into registry with the female die when the wrapping-table is moved out of registry with the male die, mechanism for moving the wrapping-table, mechanism for locking the wrapping-table in position so that the male and female dies will register, and means for forcing the male die up into the female die after the wrapping table is locked in position, although it is not to be understood that the invention is limited to a machine necessarily comprising at once all of the devices or mechanism before mentioned, for the invention consists in certain various combinations or arrangements of devices and parts and the construction of certain devices and parts, all substantially as is

hereinafter fully described, set forth, and claimed. Such machine is fully and particularly shown and described in the following specification, of which the accompanying drawings form a part, wherein similar letters and numerals of reference designate like or equivalent parts wherever found throughout the several views, and in which—

Figure 1 is a side view, looking from the right, of my improved form of combined cigar-rolling table and wrapper-cutter, R designating in all the views the front and S the rear of the machine. Fig. 2 is a view of such machine in central vertical section, looking from the left. Fig. 3 is a top plan view thereof when the table is in the extreme rearward or at-rest position, and Fig. 4 is a like view thereof showing the table in the extreme forward or working position. Fig. 5 is a front view of the wrapping-table and mechanism on the line *xx* of Fig. 4, showing the position of the parts at the moment the wrapping-table has reached the extreme forward position; and Fig. 6 is a like view on the same line, showing the position of the parts when the male die is at its highest position and the table is ready for the wrapping operation to begin. Fig. 7 is a top plan view, in detail, of the leaf-table; and Fig. 8 is a view of such leaf-table in cross-section on the line *yy* of Fig. 7, looking in the direction of the arrow. Fig. 9 is a view in detail of the locking bar and bolts. Fig. 10 is a view in detail of the link connecting the locking-bar with the die-supporting bar. Fig. 11 is a detail view of the slide or ways in which move up and down the ends of the die-supporting bar and the lock-bar, showing the gib by which wear thereof is taken up; and Fig. 12 is a view on an enlarged scale of one end of the top frame and wrapping-table, showing the shape of the locking-bolts and locking-holes.

Referring to the drawings, the reference-letter A designates the supporting-frame. B is the removable wooden table supported thereby.

C is the moving wrapping-table, supported by the frame A.

D is the male die, reciprocating through the leaf-table F.

E is the female die, carried by the moving

wrapping-table and coacting with the male die D to cut the cigar-wrapper from the leaf.

G is the leaf-holding plate, which serves to hold the tobacco-leaf in position upon the leaf-table F while the wrapping-table C is being brought into position over the same, and H is the lock-bar which carries the bolts which serve to lock the wrapping-table in position so that the male and female dies will be in exact registry one with the other.

I is the die-supporting bar, which carries the reciprocating male die D.

K is a lever, preferably in the form of a treadle, as shown, the downward movement of which carries forward the wrapping-table C.

M is a lever, preferably a hand one, as shown, which actuates the lock-bar H and die-supporting bar I.

N is the right clamp, and O the left clamp, which serve to hold the cut wrapper in place upon the wrapping-surface formed by the top of the male die D and that of the wrapping-table C.

P is the main shaft, and L is the tobacco-leaf out of which the wrapper is to be cut, the same being shown by dotted lines.

Except as otherwise especially set forth, the various parts of the machine are made of suitable metal, preferably iron or steel, and the various parts are preferably of the shape shown.

The supporting base or frame A consists of two side or leg portions 1, which are joined together at the top by a top frame 2, having a back piece 3 and side pieces 4, but preferably open at the front, as shown in Fig. 3, and such top frame may be bolted to the side pieces 1 of the frame A or may be cast integral therewith, as may be desired. Formed in or on the inner top side of each of the side pieces 4 of the top frame 2 is a suitable slide-way 5, Figs. 3, 4, 5, and 6, on which rest the sides 6 of the reciprocating wrapping-table C, which reciprocates back and forth on such slideways, such sides 6 of such table C being cut away at the top to allow the extension over the same of suitable side strips 7, which are of such thickness as to come flush with the top of the wrapping-table C, as shown in Figs. 5 and 6, and such strips 7 are firmly secured to the side pieces 4 of the top frame by suitable screws, Figs. 3 and 4, in such manner as to prevent upward movement of such table C, and lying in one or both of the slideways 5, preferably upon the right slide-way only, as shown in Figs. 5 and 6, is a suitable gib 8, which bears against the side 6 of such table C and may be pressed closer thereto as the same wears away by suitable set-screws 9, so as to take up lost motion and prevent wobbling of the table C during reciprocation and render the sliding movement thereof smooth and without jerks.

The side pieces 4 of the top frame 2 are each provided at the forward end with a downwardly-depending end portion 10, in which is formed a perpendicular slot or way

11, in which rest, so as to slide easily up and down therein, the ends of the die-supporting bar I and lock-bar H, as shown in Figs. 5 and 6, and the leaf-table F may in some cases be cast integral with the top frame 2, or it may be secured at the ends in the top of the slots 11 by suitable bolts or otherwise. After the bars I and H are in place in such slot or way 11 the bottoms of such slots 11 are closed by suitable plates 12, each of which is provided with a suitable outwardly-extending lug 13, and such bottom plates are secured in place in any desired manner, preferably by suitable screw-bolts 14, and are preferably provided with suitable set-screws 15, having lock-nuts 16, by the adjustment of which the extent of the downward movement of the lock-bar H may be regulated.

The lock-bar H is preferably of the straight form shown in detail in Fig. 9, and is provided with two upwardly-extending lock-bolts 17, rigidly secured thereto in any desired manner, and with holes 18 and end pivot-pins or extensions 19. The leaf-table F is preferably of the shape shown in Figs. 5 and 6, having the end portions lower than the central level portion thereof which forms the leaf-table proper, and the die-supporting bar I is preferably of substantially the same shape in vertical longitudinal section as is the leaf-table F, except that such bar I is preferably provided with a downwardly-depending central stiffening rib or web, as shown, and in top plan view such bar I is at the end of substantially the same shape as is the lock-bar H, being provided with holes similar to the holes 18 and with end pivots or projections similar to the pivots 19 of the bar H, and the male die D is firmly secured to the die-supporting bar I in any desired manner, preferably by means of suitable screw-bolts 20.

Secured to or formed integral with the side pieces 4 of the top frame 2, above the slots or ways 11 on each side of the machine, is an outwardly-extending horizontal lug 21, provided with a suitable vertical hole in line with a like hole formed in a similar manner in and through the lug 13, located immediately below the same, and located in such hole so as to slide easily up and down therein, extending from one lug to the other on each side of the machine, is a suitable vertical guide-rod 22, and such guide-rods 22 pass through and are rigidly secured to the die-supporting bar I, being located in the holes formed adjacent to the ends thereof hereinbefore referred to, and such guide-rods also pass in like manner through the holes in the lock-bar H, but are sufficiently loose in such holes 18 to permit of free movement of such lock-bar up and down on such rods without disturbance thereof.

The female die E may consist merely of a suitable hole, of the contour of the wrapper required to be cut, formed in and through the wrapping-table C, in which case such table C is formed of suitable steel or other hard

metal, or the table proper may be of cast-iron and a female die of suitable steel or other metal may be secured in place in the central perforation thereof in any desired manner.

5 In any case, in order to facilitate the cutting or punching action of the dies I prefer to form the under side of the female die of a convex form (not shown) and to have the top of the male die straight, or vice versa, so
10 that the action of the two dies will be substantially that of a pair of shears in cutting the tobacco-leaf. Inasmuch as metal suitable either for the table C or female die E is much too hard to be used as a cutting-surface on
15 which to cut away with a sharp knife manipulated by hand, the small superfluous portion of the cigar-wrapper necessary to be eliminated in the operation of pointing the cigar without at once ruining the knife-edge, I prefer
20 to provide the wrapping-table C with a false top 23, of some soft material that will not materially injure the edge of the sharpest knife when brought in contact therewith, and while I have found britannia metal to be
25 a first-class substance out of which to form such false top 23, which forms the wrapping-surface of the table C, the same may be made of any other suitable material, such as soft metals, wood, fiber, &c.

30 The male die D and the female die E are of course both of the same contour in horizontal section, the shape shown being that usually preferred where it is desired to cut a wrapper for wrapping a right-hand-wrapped
35 cigar, and such dies are of such relative size that when a tobacco-leaf is placed between them and the male die is forced up through the female die a cigar-wrapper of the required contour will be cut or punched from
40 the tobacco-leaf L and be carried up through the female die E on the top or face of the male die D to a level with the soft-metal false top 23 of the wrapping-table C.

45 The leaf-table F is provided with a central perforation 24 of similar contour to the dies E and D, and in this perforation, with the top thereof on a level with the high forward portion 25 of the central level portion of such
50 leaf-table F, normally rests the male die D, as shown in Fig. 5, the size of the perforation 24 being such as to permit of free reciprocating movement of such die D therein. The central level portion of said leaf-table F is provided with a rear portion 26, which is
55 about one-sixteenth of an inch or so lower in height than is the front high portion 25, and the high portion 25 and low portion 26 of such leaf-table, where they meet at the longitudinal center of the perforation 24 of such
60 leaf-table, end in an abrupt shoulder 27, and extending from one shoulder 27 to the other, around the rear contour-line of the perforation 24, is a guard-rib 28, of substantially the same height as is the front high portion 25 of such leaf-table F, all as shown in Figs. 7 and 8.

65 Secured to the rear edge of the central level portion of the leaf-table F, as shown in Figs.

2 and 8, and extending downward and rearward therefrom, preferably at the angle shown, is a thin metal plate 29, to the lower
70 rear edge of which is secured by suitable hinges 30 the upwardly-extending leaf-holding plate G, which plate G is kept normally in the rearward open position shown in Figs. 2 and 3 by suitable springs 30' or in any other
75 desired manner.

The leaf-holding plate G is preferably of the shape shown, having a downwardly and forwardly bent front end portion 31 of just sufficient thickness to fill the rear portion 26
80 of the leaf-table F level with the high front portion 25 and guide-rib 28 thereof, when such plate is forced down upon the leaf-table into the position shown in dotted lines in Fig. 4 by the forward movement of the wrapping-
85 table C. The front edge of such leaf-holding plate G is of such contour as to conform to the shoulders 27 and to the rear contour-line of the guard-rib 28 of the leaf-table F. Secured to the back or top of the forwardly-pro-
90 jecting portion of 31 of such leaf-holding plate G, preferably one at either side of such plate, as shown in Figs. 2, 3, and 8, is a flat spring 32 of such shape that as the wrapping-
95 table C moves forward and carries with it the upper end of such leaf-holding plate until the forwardly-projecting portion 31 thereof is in contact with the rear lower portion 26 of the leaf-table F the pressure of such table C will
100 be exerted upon such springs 32 and through them to the leaf-holding plate G, whereby a yielding spring-pressure will be exerted upon the tobacco-leaf L.

Revolubly mounted in suitable holes formed for that purpose through the wrapping-table
105 C at the rear thereof and adjacent to the sides, as shown in Figs. 2, 3, and 4, are two vertical shafts 33, to the tops of which are secured suitable bosses 35, to which are secured in the
110 one case the wrapper-holding clamp O and in the other the wrapper-holding clamp N, the first being on the left and the latter on the right side of the machine. Such clamps are preferably of the construction shown, consisting of arms or levers 34, hinged to the
115 bosses 35, so as to permit of the upward and downward movement of the outer free end thereof, such levers being normally pressed down upon the surface of the wrapping-table C by suitable flat springs 36, secured to the
120 bosses 35, and such levers 34 are provided at their free ends with suitable clamp-heads 37, preferably of the shape shown, the bottom plates 38 of which are so secured to the heads 37 and are of such size as to be forced down
125 a half inch or so into the female die E when such heads are brought into registry therewith, as shown in Figs. 2 and 3.

Rigidly secured upon the lower end of each of the shafts 33, preferably by means of a
130 suitable set-screw 29, and mounted in suitable studs, Figs. 2, 3, and 4, which project inward from the side pieces of the top frame 2 on each side of the machine, near the rear

thereof, are two pins or stops 40, so situated as to come into contact with the levers 39, located upon their respective sides of the machine, so as to throw the wrapper-clamp heads inward from the sides of the wrapping-table C and into the ends of the cavity of the female die E, when the wrapping-table is pushed rearward to the limit of its travel, as shown in Figs. 2 and 3.

- 10 In order to stretch the wrapper-leaf side-wise over the leaf-table F, I prefer to have the lever 39 on one or both of the wrapper-clamps set so as to be thrown a short distance inward toward the center of the die, as shown
- 15 in Fig. 3, and to provide a suitable spring-stop 41 on the inner side of the leaf-table F, against which the lever 39 will be brought during the last inch or so of the forward movement of the wrapping-table C, so as to force the wrapper-clamp back to the extreme end of the female die E into the position of the right holding-clamp N, (shown in Fig. 4,) and I prefer to make such stop 41 of a yielding or spring form, in order to have the wrapper-clamp at
- 25 all times brought tightly against the end of the female die, so as to stretch the leaf to the fullest extent, without danger of the clamps being pressed too tightly against the ends of such die.
- 30 Mounted in suitable bearings secured to the side pieces 1 of the frame A in such manner as to be wholly or partially revoluble therein, and running across the frame from side to side, adjacent to the rear thereof, is the main shaft P, and to the outer right end of this shaft P is rigidly secured the hand-lever M, which extends from such shaft to the front of the machine, so that the handle thereof may be easily grasped by a person seated at
- 40 the front R thereof.

- Rigidly secured to the main shaft P, preferably one on either side of the machine and within the frame A, Figs. 1 and 2, is a short lever 42, pivotally connected by means of a
- 45 suitable connecting-rod 43 with a lever 44, which is pivoted to the downwardly-depending front end portion 10 of the side piece 4 of the top frame 2 by means of a pivot-bolt or short shaft 45, and such lever 44 is provided
- 50 at its forward end with a horizontal slot, (shown in Figs. 1, 5, and 6,) in which rests the center-pin 46 of the link 47, which link is shown in detail in Fig. 10. Each of these links 47 is provided with a lower rounded
- 55 hole 48 to receive one of the round pivoted ends 19 of the lock-bar H, and with an upper vertically-elongated slot 49, adapted to receive one of the projecting rounded end portions 50 of the die-supporting bar I, which are
- 60 of such shape and size as to play freely up and down in such slot.

- As shown in Figs. 5 and 12, the upper ends of the lock-bolts 17 normally lie in suitable holes 51, formed for that purpose in the ends
- 65 of the leaf-table F and side pieces 4 of the top frame 2, and when the locking-bar H and die-supporting bar 1 are carried upward into

the position shown in Fig. 6, after the wrapping-table C has reached its extreme forward position shown in Fig. 4, the upper ends of such lock-bolts 17 pass up through suitable holes 52, formed for that purpose through the sides 6 of the table C, and the extreme ends of such bolts enter suitable locking holes or cavities 53, formed in the under side of the forward end of the strips 7. These various holes and the lock-bolts 17 are of such relative size that while the bolts slide easily up and down therein the fit is sufficiently tight to hold the wrapping-table C locked firmly in position, so that the male and female dies are in exact registry one with the other when the bolts 17 are shot fully home into the locking-holes, as shown in Fig. 6, and for the reason that in hurried working the table C will not always be brought into exact position to receive the male die in the female die the locking-bolts 17 are slightly pointed at the upper ends and the holes 52 through the sides 6 of the wrapping-table C are made slightly flaring by reaming at the bottom, as shown in detail in Fig. 12, by which arrangement the lock-bolts 17 are unerringly directed into the locking-holes 52 in the table C upon the first upward movement of the lock-bar H even when the table C is not in proper position to receive the male die D, and the continued upward movement of such bolts in the holes 52 serves to force the wrapping-table C unerringly into position to receive the male die D, and as the bolts 17 have entered a considerable distance in the holes 52 in the table before the male die D begins to enter the female die E sticking and consequent dulling of the cutting-edges of the two dies by reason of the imperfect registry thereof are prevented. Mounted upon the main shaft P within the frame A, so as to be wholly or partially revoluble thereon, is a sleeve 54, Figs. 1 and 2, to which sleeve is rigidly secured a lever 55, connected at the other end by suitable connections with a connecting-rod 56, which rod 56 is in its turn secured to the rear of the wrapping-table C, and also rigidly secured to such sleeve 54 is a lever 57, suitably connected with a connecting-rod 58, secured in any suitable manner at its other end to a lever or treadle K, the rear end of which is pivotally supported upon a suitable shaft 59, supported by the lower rear portions of the frame A.

In order to take up the lost motion caused by wear of the ends of the lock-bar H and guide-bar I sliding up and down in the ways 11, suitable gibs 34' are preferably provided, (shown in Fig. 2 and in detail in Fig. 11,) which are adjusted and held in place in the side portions 10 of the side pieces 4 on the top frame 2 in any desired manner, preferably by suitable set-screws 35'.

In order to prevent jarring of the machine during rapid working, suitable spring-stops 60 are preferably provided at the ends of the side pieces 4 of the top frame 2, against which

the ends of the wrapping-table come in contact when the same is forced fully forward, and a solid stop or stops, preferably one on each side of the table C, is provided, preferably consisting of an adjustable set screw or screws 60', (shown in Fig. 2,) which comes in contact with the rear side of the leaf-table F immediately after the forward movement of the table C has been retarded by the action of the spring-stops 60 in such manner as to bring such table C to a dead stop, and rear stops, (not shown,) of spring or other form, may, if desired, be provided to limit the rearward movement of the table C and to prevent jarring of the same upon such movement.

A suitable wooden table B, having upwardly-extending side pieces, as shown in Fig. 1, and having a central hole at the forward side thereof of the size and shape of the wrapping-table C, may, if desired, be provided and suitably supported upon the top frame 2, so as to increase the table-surface available for piling tobacco, cigar-bunches, finished cigars, &c., and a trough 61 may, if desired, be secured to the front of the frame A, as shown in Fig. 2, to hold tobacco; but I have not deemed it necessary to show such wooden table more fully than is shown in Fig. 1.

It will be seen that a downward movement of the lever or treadle will partially rotate the sleeve 51 toward the front, and that this movement, by reason of the mechanism connecting such sleeve with the wrapping-table C, will at once force such wrapping-table into the extreme forward position shown in Fig. 4, and that as soon as the table C is in such position by lifting up upon the forward end of the hand-lever M the lock-bar H will be carried upward, so as to force the lock-bolts 17 into the lock-holes 52 in the wrapping-table C, so as to lock such table in such forward position, after which the pressure may be removed from the treadle without the position of the mechanism being in any wise altered. In order that at the moment that the table is unlocked by the depression of the hand-lever M and the consequent drawing of the lock-bolts 17 from the lock-holes 52 the wrapping-table may be automatically returned to the extreme rearward position shown in Figs. 1 and 3, a coil spring 62 is preferably secured at one end to the lever 57 and at the other to the top frame 2, by the action of which the table C is at once forced rearward the instant the same is unlocked.

The operation of the machine is as follows: The machine being at rest and the parts being in the positions shown in Figs. 1, 2, and 5, the operator takes position at the front R of the machine and places a stripped tobacco-leaf L, from which the wrapper to be used is to be cut, in position over the male die D and on the leaf-table F, lengthwise of such table and die, and preferably with the straight edge of the stripped half-leaf coincident with the most extreme forward point of the front edge of the male die D and with the rear part of

the leaf extending down into the cavity or space lying between the plate 32 and the leaf-plate G, taking care, of course, to so place such leaf L as to cut as large a number of wrappers as possible therefrom and so economize tobacco, and the moment such leaf is in position the operator presses with his foot upon the lever or treadle K, while at the same time holding the leaf properly stretched in position over the die D, and as the wrapping-table C is in consequence moved forward the first forward movement of such table forces the hinged leaf-holding plate G down upon the tobacco-leaf L, when the parts will be in the position shown in Fig. 4 and such leaf will be held firmly in position upon the leaf-table F by such plate G. Then the operator, while still keeping his foot firmly pressed down upon the treadle K, takes hold of the hand-lever M with his hand and presses down upon the same. This causes an upward movement of the links 47, which carry upward with them the lock-bar H, and the lock-bolts 17, starting into the holes 52 in the wrapping-table C, at once draw such table into position to receive the male die D, and as soon as the links 47 have been carried upward sufficiently far for the ends 50 of the die-supporting bar I to come into contact with the upper ends of the slots 49 such bar I is carried upward, carrying with it the guide-rods 22, to which such bar I is rigidly secured, and as this upward movement continues the lock-bolts 17 are pushed farther and farther into their lock-holes and the male die D is forced up through the female die E in such manner as to cut or punch out of the tobacco-leaf L and carry upward through said die E to a level with the top of the wrapping-table C on top of said male die D a cut wrapper punched from said tobacco-leaf L of the shape and contour of said die, and just before the top of the male die D reaches its highest level, even with the britannia false top 23 of the wrapping-table C, so as to form an even and smooth surface on which to wrap the said wrapper upon the cigar-bunch, the cut wrapper is brought into contact with the plates of the wrapper-clamps N and O, so as to press such wrapper down on the top of the male die D and hold the same in place thereon, the peculiar spring construction of such wrapper-clamps causing the same to be carried up on top of the cut wrapper until they are on a level with the upper surface of the false top 23 of the wrapping-table, at which time all the parts will be in the position shown in Figs. 4 and 6 and the moving parts of the machine will be firmly locked in place, and the levers M and K, being relieved from pressure, the parts will remain in such position until unlocked by the lifting upward of the hand-lever M. The operator then slides the left-hand clamp O off from the cut wrapper and male die into the position shown in dotted lines in Fig. 4, and, laying a cigar-bunch upon the cut wrapper, begins to roll such bunch in such wrap-

per in the well-known manner, beginning at the left end of such wrapper, from which the clamp O has just been removed, and rolling toward the right until close to the clamp N, such clamp N serving to hold the wrapper in place during the rolling, after which such clamp N is moved sidewise to the right into the position shown in dotted lines in said Fig. 4, when the wrapper will no longer be held in position in any manner and the cigar may be pointed and finished in the usual way, the soft-metal false top 23 of the wrapping-table C being used as a cutting-board and the superfluous portion of the wrapper necessary to be eliminated and pointed being cut away with a hand-knife in the well-known manner. As soon as the cigar has been finished the operator lifts upward on the hand-lever M, and this forces downward the lock-bar H, carrying the lock-bolts 17, and the die-supporting bar I, carrying the male die D, into the position shown in Fig. 6, and the instant the lock-bolts 17 are free of the lock-holes 52 in the wrapping-table C the action of the coil-spring 62 instantly forces the wrapping-table back into the rearward position shown in Figs. 2 and 4, and during such rearward movement of the table C the levers 39 of the wrapper-clamps N and O are brought forcibly into contact with their actuating-pins 40, so as to force said clamps N and O inward toward the center of said wrapping-table C, and the instant the plates of such clamps register with the ends of the female die E the springs of such clamps force such plates down into such die E and into the position shown in Figs. 2 and 3. At the same time, and simultaneous with the removal of the pressure of the wrapping-table C from the leaf-holding plate G, such plate G is swung rearward in the open position shown in Figs. 2 and 8 by the action of the spring or springs 30. The operator then draws the remaining portion of the wrapper-leaf up out of the space between the leaf-holding plate G and the plate 29, to which such plate G is hinged, and stretches such wrapper-leaf over the leaf-table F and die D, as hereinbefore described, and again operates the treadle and hand-lever, as described, to punch out another wrapper, and the operation referred to is repeated until the leaf is used up and a new one is substituted therefor.

The form of wrapper-die shown in the drawings is that used in cutting cigar-wrappers of the shape used in wrapping what is known as "right-hand wrapped" cigars, and when the machine is to be used in cutting wrappers to be used in wrapping left-hand wrapped cigars dies of the contour and shape of the dies shown when the same are inverted end for end are used.

It is evident that many changes may be made in the construction, combination, and arrangement of the various parts of my improved device herein shown and described without departing from the scope of my invention, and I do not intend to limit myself

to any particular form of construction thereof. For instance, any means of locking the moving wrapping-table C in position before the male die D begins its upward movement may be used, or two treadles, or two hand-levers, or any suitable means for actuating the table, the locking mechanism, and the male die may be used with equal effect.

Certain portions of the construction shown and set forth herein I have neither described minutely nor attempted to claim, broadly, herein, for the reason that such mechanisms are more fully shown and described and broadly claimed by me in my application for United States Letters Patent thereon, Serial No. 549,614, filed May 17, 1895.

Having now particularly described my said invention, the construction and operation thereof, what I claim, and desire to secure by Letters Patent, is—

1. In a device of the class described, the combination with a reciprocating wrapping-table, of a female-die carried by the wrapping-table, a vertically reciprocating die-supporting-bar I, a male-die D carried by the bar I, mechanism for actuating the wrapping-table, mechanism for locking the wrapping-table in position for the male-die to register with the female-die, and a lever in actuating connection with the locking mechanism and the die-supporting bar I, substantially as shown and described.

2. In a device of the class described, the combination with a reciprocating wrapping-table having holes 52, of a female-die carried by the wrapping-table, a vertically reciprocating die-supporting-bar I, a male-die D carried by the bar I, a lock-bar H, lock-bolts 17 carried by the lock-bar and adapted to enter the locking-holes 52, the frame having cavities that are flared or reamed at the bottom for receiving the ends of the lock-bolts 17, means for actuating the wrapping-table, and means for actuating the die-supporting bar and lock-bar, substantially as shown and described.

3. In a device of the class described, the combination with a reciprocating wrapping-table, of a female-die carried by the wrapping-table, a vertically reciprocating die-supporting-bar I, a male-die D carried by the bar I, a lock-bar H, means carried by the lock-bar for locking the wrapping-table in position for the dies to register, links 47, each having a round hole 48 at the bottom to receive the end of the lock-bar H and a slot 49 for receiving the end of the die-supporting bar I and a lever or levers 44 for actuating the lock-bar H, substantially as shown and described.

4. In a device of the class described, the combination with a reciprocating wrapping-table, of a female-die carried by the wrapping-table, a leaf-table F, a vertically reciprocating die-supporting-bar I located below the leaf-table, a male-die carried by the bar I, a reciprocating upward through the leaf-table, a

lock-bar H carrying mechanism for locking the wrapping-table in position so the male and female-dies will register located below the bar I, and mechanism for vertically reciprocating the bars I and H in the manner set forth, substantially as shown and described.

5. In a device of the class described, the combination with a reciprocating wrapping-table, of a female-die carried by the wrapping-table, a leaf-table F, a vertically reciprocating die-supporting bar I located below the leaf-table, a male-die carried by the bar I reciprocating upward through the leaf-table, a lock-bar H carrying mechanism for locking the wrapping-table in position so the male and female-dies will register located below the bar I, links 47 connecting the bars I and H, mechanism for actuating the links, vertical guide-rods 22 reciprocating in suitable bearings and rigidly secured to the bar I and loosely mounted on the bar H, and means for actuating the wrapping-table, substantially as shown and described.

6. In a device of the class described, the combination with a reciprocating male-die, of a reciprocating wrapping-table, carrying a female-die, a swinging clamp or clamps carried by the wrapping-table adapted to enter the female-die, means for automatically swinging the clamp or clamps into registry with the female die upon the rearward movement of the wrapping-table, and means for drawing the clamp or clamps toward their respective ends of the female die upon the forward movement of the wrapping-table, substantially as shown and described.

7. In a device of the class described, the combination with a reciprocating male-die, of a reciprocating wrapping-table carrying a female-die, a vertically reciprocating die-supporting-bar I, a male-die carried by the bar I, a lever for reciprocating the bar I, and a lever for moving or reciprocating the wrapping-table, substantially as shown and described.

8. In a device of the class described, the combination with a reciprocating male-die, of a reciprocating wrapping-table carrying a female-die, a vertically reciprocating die-supporting-bar I, a male-die carried by the bar I, a lock-bar H, locking-bolts carried by the

lock-bar, a lever for reciprocating the bars I and H, and a lever for moving or reciprocating the wrapping-table, substantially as shown and described.

9. In a device of the class described, the combination with a reciprocating male-die, of a reciprocating wrapping table carrying a female-die, a leaf-table F having a perforation 24 to receive the male-die and a high front portion 25 and a lower rear portion 26 and a guard-rib 28 of the same height as the front portion 25 of the leaf-table forming the rear contour line of the perforation 24, a leaf-holding plate G having a front edge of the contour of the rear side of the guard-rib 28 adapted to be forced down upon the lower rear portion of the leaf-table so that its upper surface will lie flush with the top of said guard-rib, when the wrapping-table is moved to its forward position, and means for reciprocating the male-die and the wrapping-table, substantially as shown and described.

10. In a device of the class described, the combination with a reciprocating wrapping-table, of a leaf-table, a male-die reciprocating vertically through the leaf-table, a female-die carried by the wrapping-table, a leaf-holding-plate G, and a spring or springs 32 through which the pressure of the wrapping-table is exerted upon the leaf-holding-plate G, substantially as shown and described.

11. In a device of the class described, the combination with a reciprocating wrapping-table, of a female-die carried by the wrapping-table, a vertically reciprocating male-die, a movable shaft P having a lever M secured thereto, mechanism connecting the shaft with the reciprocating male-die, a sleeve movably mounted upon the shaft P, a lever K in actuating connection with the sleeve, and mechanism connecting the sleeve with the wrapping-table, substantially as shown and described.

Signed at the city and county of New York, in the State of New York, this 6th day of July, A. D. 1895.

JOSEPH DELA MAR.

Witnesses:

BERNARD VAN LEER,
GEO. DUSTERDIECK.