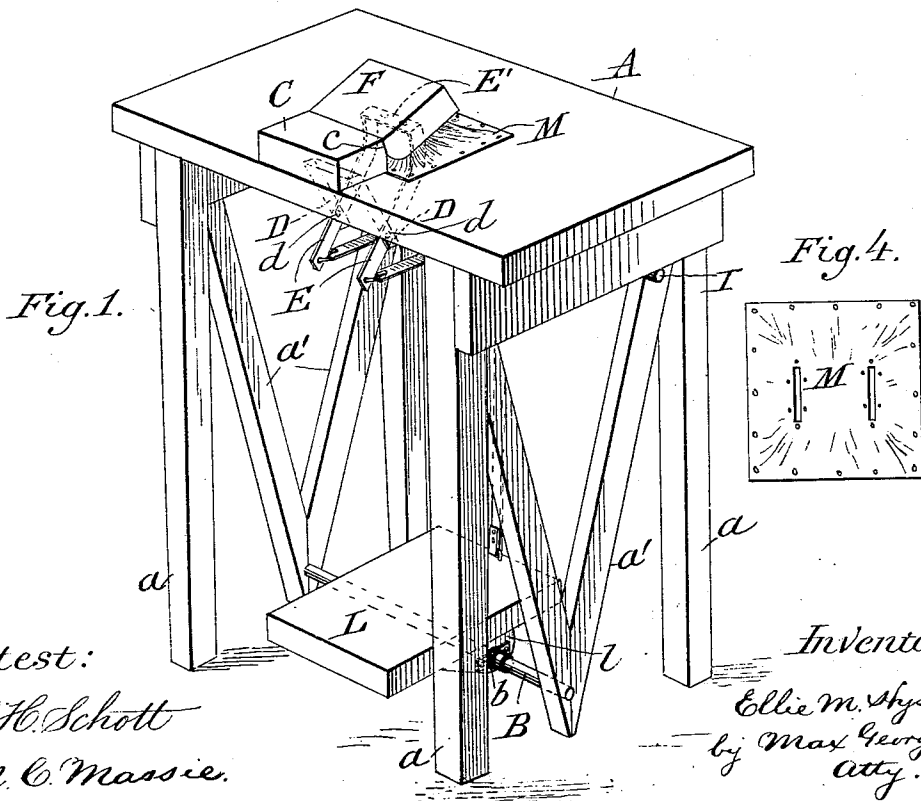
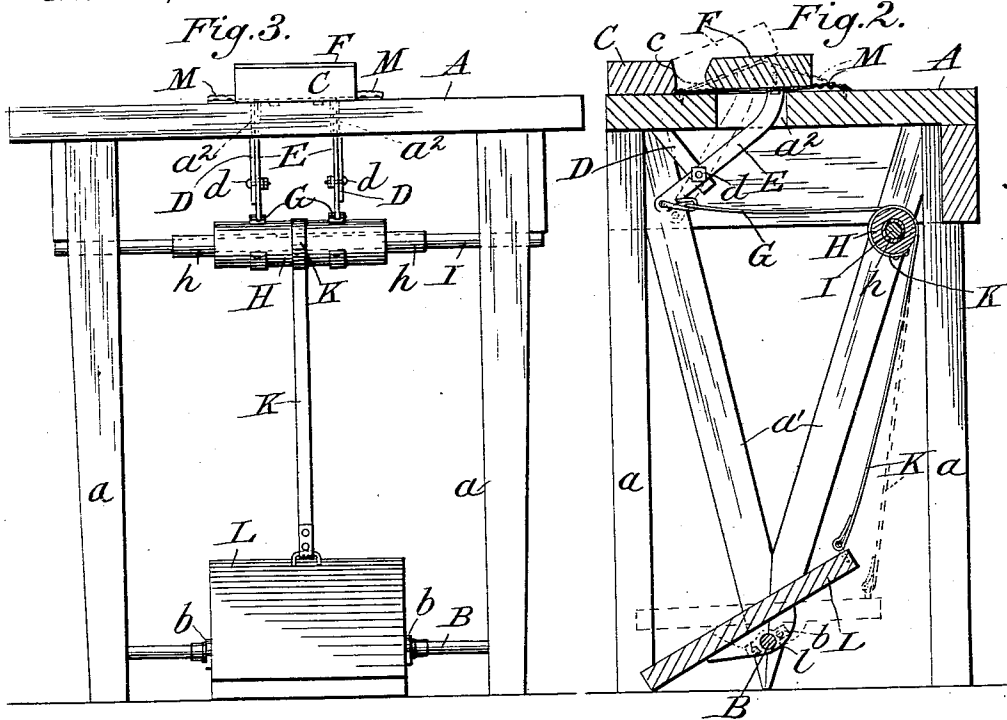


(No Model.)

E. M. HYSLOP.
CIGAR ROLLER'S CLAMP.

No. 564,751.

Patented July 28, 1896.



Attest:

J. H. Schott
M. C. Massie.

Inventor

Ellie M. Hyslop
by Max Georgie
Atty.

UNITED STATES PATENT OFFICE.

ELLIE M. HYSLOP, OF MANCHESTER, VIRGINIA.

CIGAR-ROLLER'S CLAMP.

SPECIFICATION forming part of Letters Patent No. 564,751, dated July 28, 1896.

Application filed October 21, 1895. Serial No. 566,346. (No model.)

To all whom it may concern:

Be it known that I, ELLIE M. HYSLOP, a citizen of the United States, residing at Manchester, Chesterfield county, Virginia, have
5 invented certain new and useful Improvements in Cigar-Rollers' Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to
10 which it appertains to make and use the same.

My invention relates to improvements in cigar-rollers' clamps, and particularly to a treadle-operated clamp intended for use in
15 the manufacture of cheroots.

The object of my invention is to produce a clamp for holding one edge of the cigar or cheroot wrapper while the filler is being rolled within the same, and which will at the same
20 time be free from many of the disadvantages now existing in those clamps of which I have any knowledge.

My invention consists in the features, details of construction, and combination of
25 parts which will first be described in connection with the accompanying drawings, and then particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a device embodying my invention,
30 showing the clamp in its closed position. Fig. 2 is a central vertical section of the same, the clamp being shown in its open position. Fig. 3 is a front view of the device. Fig. 4 is a detail view.

Referring to the drawings, A is a table provided with legs *a*, and with two pairs of inclined side arms *a'*, which are united at their lower ends to form hangers for a rod B, which serves as a brace for the hangers, and at the
40 same time supports a treadle mechanism. To the top of the table is secured a rolling-block C, whose edge is slightly beveled, as shown at *c*. To the under side of the table are attached brackets D, which carry levers E, pivoted to the said brackets by means of bolts
45 or screws *d*, said levers E having their upper ends projecting through slots *a''* in the table-top, the upper ends of the said levers E being united by a cross-piece E', preferably
50 integral with the levers, which is secured to the under side of a swinging clamp F, whose

front edge is beveled to contact with the rear edge *c* of the rolling-block C.

The lower front edge of the swinging clamp F is preferably rounded, as shown in Fig. 2. 55 To the downward-projecting ends of the levers E are secured draft devices, such as straps or cords G, which pass around and are secured to a drum H of wood, which is mounted on a sleeve *h* of brass or other suitable antifriction material, this sleeve surrounding an axle I, fixed in the upper ends of the inclined side arms *a'*. The drum H and its sleeve *h* are free to move longitudinally on said axle I. Around the central portion of
60 the drum is wrapped one end of a cable, chain, cord, or strap K, which may be termed the "treadle-strap," said end of the strap being secured to the drum H, while the other end is attached to a treadle L, having journals *l*
70 on its under side, through which passes the rod B, hereinbefore referred to, a collar *b* being fixed on said rod B at each side of the treadle, and bearing against the journals to prevent lateral movement of the treadle. 75

The operation of the mechanism thus far described is as follows: When the treadle L is depressed at its rear end by the foot of the operator, the treadle-strap K is drawn down, thereby unwinding it from the drum H. This
80 treadle-strap in unwinding causes the drum to rotate and wind up the straps G, which are wound around the drum H in a direction opposite to that of the strap K. The straps G, when wound up by the drum, pull the
85 lower ends of the arms E rearward, thereby swinging the upper ends forward and carrying the clamp-block F with its front edge into close contact with the rear edge *c* of the rolling-block C, and at the same time lift-
90 ing the rear edge of said clamp-block F so that the clamp-block assumes an inclined position. When the front edge of the clamp-block engages the rear edge of the rolling-block, it will be seen that it will clamp any
95 wrapper which may be inserted between said edges. As soon as the operator has clamped one edge of the wrapper he places the filler of the cigar within the wrapper, which is thereby smoothed out upon the top of the
100 rolling-block. The wrapper is now rolled over the filler in a direction from the opera-

tor until the rolled cigar passes on to the lower edge of the swinging clamp-block, whereupon the operator releases his foot from the treadle and the weight of the clamp-block, together
 5 with the elasticity of the straps G, causes the drum H to unwind said straps and allow the clamp-block F to drop to a practically horizontal position, whereupon the operator continues the rolling of the cigar along the
 10 top surface of the said clamp-block, after which a new wrapper is placed into position to be clamped and the treadle pressed again, the operation being continued, as above described.

15 As in those constructions with which I am acquainted there is considerable waste of filler through the slots in the top of the table, I provide the upper ends of the arm E in my construction with a curve which enables me
 20 to place the slots in the table considerably to the rear of the front edge of the clamp-block, whereby there is less chance of the filler dropping through said slots, and to further avoid any disadvantage of this kind
 25 I place a sheet of flexible material M loosely upon the top of the table and tack its edges to said table, said sheet M being beneath the clamp-block F and provided with two holes through which the upper ends of the arms E
 30 project, said sheet of flexible material being tacked to the under side of the clamp-block closely around the upper ends of said arms, whereby all danger of the filler falling through the holes through which the arms E project
 35 is avoided, said sheet M being loose enough to allow the clamp-block to move freely, while at the same time preventing any portion of the filler from falling through the slots in the table.

40 It will be seen that as the roller H and its sleeve h are free to move longitudinally on the axle I said roller H can adjust itself to the movements of the straps G and K in winding or unwinding. The treadle L is returned
 45 to its normal position, when the foot of the operator is removed, by its own weight and the elasticity of the strap K assisted by the weight of the clamp-block returning to its rearward position.

50 The advantages of my construction are, first, that the rolling-block C is fixed, and hence the cigar may be rolled thereon in wrapping and the end of the wrapper released without danger of crumpling the wrapper, as
 55 occurs in those constructions where the rolling-block is movable. Furthermore, by having the clamp-block to swing from a rearward position practically horizontal to its forward position, in which it stands at an incline, I
 60 obtain two desirable results, first, in the inclined position the filler is retained in the wrapper much better than if the clamp-block were horizontal, and, second, after the cigar has passed the two clamping edges of the
 65 blocks F and C and the edge of the wrapper is released by the return of the clamp-block to its normal position, the cigar can be more

readily completed by rolling farther backward on the horizontal surface of the clamp-block than if it were lifted forward again
 70 onto the top of the rolling-block, while at the same time if the top of clamp-block F were inclined the completion of the rolling operation would be much more difficult than when it is horizontal, or nearly so. Again, the con-
 75 tinuation of the rolling process on the top of the clamp-block assists in returning said clamp-block to its normal position as soon as the foot of the operator is lifted from the treadle. This, together with the construction
 80 of the operating mechanism for swinging the clamp-block, enables all the parts to return to their normal position without the use of springs, which are a great disadvantage in devices of this kind, as they lose their elas-
 85 ticity and break after a limited amount of use.

While I have described two arms E and brackets D, it will, of course, be understood that I may employ only one arm and bracket
 90 and one strap G, if desired, but I find there is a great advantage in the employment of two such brackets and arms, one near each end of the clamp-block. In this way the chances of any lateral movement of the clamp-
 95 block with relation to the rolling-block are avoided and the front edge of the clamp-block is always brought up squarely against the rear edge c of the rolling-block C, and the pressure is thereby equalized all along the
 100 edge of the clamped portion of the wrapper, so that the wrapper may be pulled out smooth on the top of the rolling-block and there is no danger of the wrapper being torn by unequal strain, as occurs in those constructions
 105 where the blocks approach each other with their meeting edges at a slight angle, as often occurs from wear in the various parts.

I am aware that it is old to construct a clamp in which the front block C is made
 110 movable toward and from the rear block F, which is stationary and inclined, but in such construction the movement of the front block in releasing the edge of the wrapper causes the said wrapper to crumple or wrinkle, be-
 115 cause the movement of the front block in releasing the wrapper is opposite to the direction in which the cigar is being rolled. Furthermore, the incline of the rear block, which is most advantageous for holding the filler in
 120 the wrapper at the beginning of the rolling operation, is greater than is suitable when the rolling operation is being completed on the said inclined surface, and hence with a fixed block there is the disadvantage that
 125 the incline can only be suitable for one purpose, while in my construction by the tipping of the rear or clamp block from one incline to another I render it possible to provide an incline suitable for both purposes, since the
 130 angle of incline is changed at the same time the edge of the wrapper is released.

I am aware also that it is old to have the front block fixed and a rear clamping device

arranged to engage the top rear surface of the fixed block, but this construction has the disadvantage that the cigar cannot be rolled past the point where the wrapper is clamped, and hence as soon as the said wrapper is released the cigar must be drawn bodily forward on the rolling-block in order to give sufficient room at the rear of the cigar to complete the rolling operation, thus creating a friction which causes the wrapper to tear or wrinkle, and at the same time requiring more time for the rolling operation.

The disadvantages referred to are avoided in my construction, as will be obvious to those skilled in the art.

What I claim, and desire to secure by Letters Patent, is—

1. In a clamp of the class described, the combination, with a fixed rolling-block, of a clamp-block arranged to tilt toward and move from the rolling-block, whereby the angle of inclination of the said clamp-block is varied at the same time the wrapper is released, substantially as set forth.

2. In a clamp of the class described, the combination, with a fixed rolling-block, of an arm pivoted below the rolling-block, and a clamp-block carried by said arm and arranged to engage the rolling-block, substantially as set forth.

3. In a clamp of the class described, the combination, with a fixed rolling-block, and

a movable clamp-block arranged to engage the rolling-block, of a lever secured to the clamp-block, a rotatable drum, a draft device wound on the drum and engaging the lever, and mechanism for rotating the drum, substantially as set forth.

4. In a clamp of the class described, the combination, with a table, and a rolling-block fixed to the table, of a lever pivotally mounted in the table, a clamp-block carried by the lever and arranged to engage the rolling-block, a drum mounted in the table, a draft device wound on the drum and connected to the lever, a treadle, and means intermediate the treadle and drum, whereby the latter is rotated, substantially as set forth.

5. In a clamp of the class described, the combination, with a slotted table, and a rolling-block fixed to the table in advance of the slots, of a pair of levers pivotally mounted in the table, a clamp-block carried by the said levers, and means for swinging said levers, whereby the clamp-block is brought into contact with the rear edge of the rolling-block, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ELLIE M. HYSLOP.

Witnesses:

A. B. TYSON,
GEO. E. GARY.