(No Model.)

H. B. TIFFANY.

ATTACHMENT FOR WALL PAPER TRIMMING MACHINES.

No. 489,345. Patented Jan. 3, 1893.

Fig. 1.

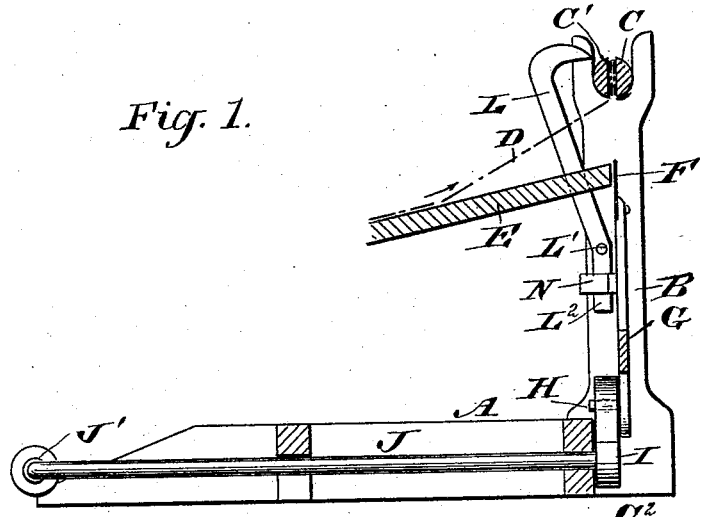


Fig. 2.

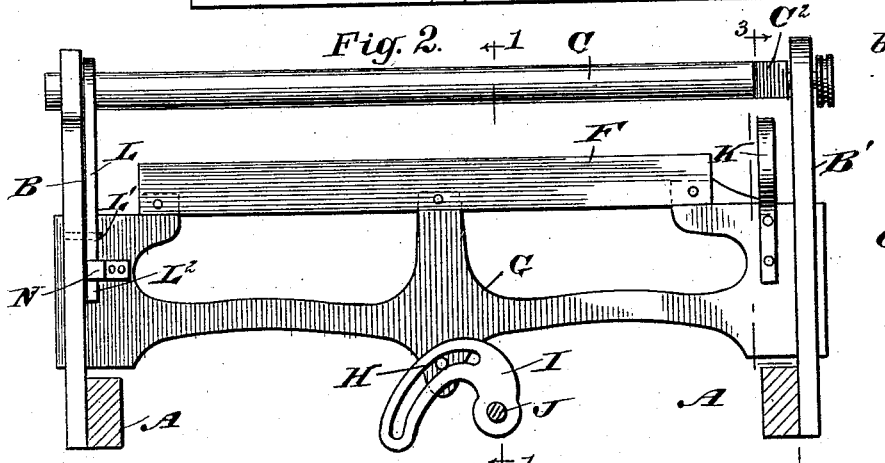


Fig. 3.

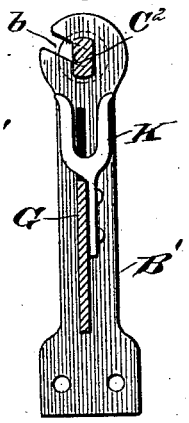
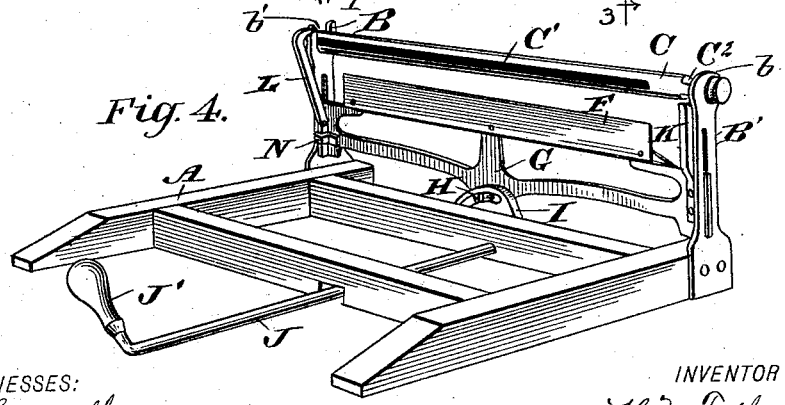


Fig. 4.



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ATTACHMENT FOR WALL-PAPER-TRIMMING MACHINES.

SPECIFICATION forming part of Letters Patent No. 489,345, dated January 3, 1893.

Application filed July 22, 1892. Serial No. 440,866. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. TIFFANY, of Clyde, in the county of Sandusky and State of Ohio, have invented a new and Improved Attachment for Wall-Paper-Trimming Machines, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved attachment more especially designed for use on wall paper trimming machines, which is simple and durable in construction, very effective in operation and arranged for conveniently, quickly and securely fastening the end of the paper to the receiving roller.

The invention consists of a slotted paper-receiving roller, and a reciprocating plunger for pushing the end of the paper into the slot to attach the paper to the roller.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement on the line 1—1 of Fig. 2; Fig. 2 is an end view of the same with parts of the frame in section; Fig. 3 is a sectional side elevation of part of the improvement on the line 3—3 of Fig. 2; and Fig. 4 is a perspective view of the improvement.

The improved attachment is provided with a suitably constructed frame A, having standards B, B′, in the upper forked ends of which a roller C is journaled said roller being formed with a slot or slit C′, into which the end of the paper D is passed, to attach the paper to the said receiving roller C. The open slot or fork *b* of the standard B extends vertically while the fork or slot *b*′ of the standard B′ extends upwardly and outwardly at an angle to the said slot or fork *b*. The paper passes over the usual feed board E, extending from the trimming machine to guide the paper to the said receiving roller.

A plunger F, arranged below the receiving roller C between the standards B, B′, serves to press the paper into the slot C′ of the receiving roller, the said plunger being in the shape of a thin plate somewhat less in thickness than the width of the slot. The top edge of the plunger F is in line with the top surface of the feed table E, so that when the paper is passed over the latter a short distance beyond the rear edge thereof, then it hangs over the said plunger, and as the latter moves upward it takes this doubled up end of the paper and carries it upward and pushes it into the slot C′ of the receiving roller C, so that the paper is doubled up, remaining in the slot on withdrawing the plunger. The plunger F is secured on a frame G mounted to slide in suitable guideways formed in the standards B and B′.

On the frame G, near the middle thereof, is secured a pin H engaged by a cam groove of a cam I fastened on the longitudinally extending shaft J mounted to turn in suitable bearings in the frame A. On the outer end of the shaft J is secured a handle J′ adapted to be taken hold of by the operator, so as to turn the said shaft J to cause the cam I to move the plunger frame G up or down in its bearings, to cause the plunger F to carry the paper into the slot C′ of the receiving roller C, as above described.

On one side, near one end of the frame G, is secured an aligning device or fork K adapted to engage a flat part C^2 of the roller C, so as to hold the latter with its slot in alignment with the plunger during the time the plunger F carries the paper upward and said aligning device or fork also serves to lock the adjacent end of the roller against being forced out of the inclined slot *b*. The flattened part C^2 is arranged in line with the slot C′ so that when the fork K engages the said flattened part, the latter stands vertically and is held in this position, and consequently the slot C′ is in a like position for the ready entrance of the paper carried by the plunger.

On the standard B is pivoted a hook L having its fulcrum on a pin L′ projecting from the inside of the said standard. The hook L is provided with a downward extension L^2 extending at an angle to the shank of the hook L, as will be readily understood by reference to Fig. 1. A keeper N secured on the plunger frame G engages the outer edge of the said extension and is also adapted to engage the shank of the hook L at the time the plunger

frame moves upward. When the plunger frame G is in a lowermost position, as shown in Fig. 1, then the keeper N engages the extension L^2, thus holding the hook end of the hook L out of contact with the roller C, but when plunger frame G moves upward, the keeper end moves with it and finally engages the shank of the hook L, so as to swing the latter inwardly to engage its hook end over the top of the roller C, thereby locking the latter in place in the slot or fork *b* during the time the plunger F moves the paper in position in the slot C'.

The operation is as follows:—When the several parts are in the position shown in Figs. 1 and 4, and the paper is passed up the feed table E to hang over the plunger F, as previously described, then the operator takes hold of the handle J' and swings the same upward so as to cause the frame G and plunger F to move upward, as previously described. The fork K holds the roller C in the proper position and the hook L locks the roller in position as above explained at the time the plunger F inserts the paper end in the slot C'. When this has been done, the operator turns the handle J' downward, so that the plunger F is withdrawn from the paper in the slot and at the same time the fork K is disengaged from the flattened part C^2 and the hook L is again swung outward to unlock the roller C by the keeper N engaging the extension L^2 of the said hook. The roller C, by being connected by pulley and belt or other device with the trimming machine, is now rotated in the usual manner and the paper wound up on the roller. When the paper has been entirely wound on the roller C, the end of the latter is lifted out of the standard B, and the roll of paper slipped off over this end of the roller, it being understood that the slot C' extends from the flat part C^2 of the roller to the other end, having its bearing in standard B.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:—

1. The combination with a frame and the paper winding roll turning freely in bearings therein, and having a narrow longitudinal slot to hold the end of the paper while it is being wound around the roller, of a reciprocating plunger blade separate and independent of the roller and adapted to push the end of the paper into the roller slot, substantially as described.

2. An attachment for wall paper trimming machines, comprising a slotted paper-receiving roller, a reciprocating plunger for pushing the end of the paper into the slot, and means for locking the roller in place during the time the paper is inserted in the slot, substantially as shown and described.

3. An attachment for wall paper trimming machines, comprising a slotted paper-receiving roller, a reciprocating plunger for pushing the end of the paper into the slot, and an aligning arm carried by the plunger to hold the said roller in the proper position so that its slot stands in alignment with the reciprocating plunger, said roller being constructed at one end to co-operate with said aligning arm, as set forth.

4. An attachment for wall paper trimming machines, comprising a slotted paper-receiving roller, a reciprocating plunger for pushing the end of the paper into the slot, means, substantially as described, for moving the said roller into the proper position so that its slot stands in alignment with the reciprocating plunger, and means for locking the roller in place after it is moved into the proper position, as set forth.

5. In an attachment for wall paper trimming machines, the combination with a slotted roller, of a plunger adapted to push the paper into the said slot, and a shaft having a cam engaging a pin or projection on the plunger for imparting a reciprocating motion to the said plunger, as set forth.

6. In an attachment for wall paper trimming machines, the combination with the slotted paper receiving roller, a hook for locking the paper-receiving roller in place and provided with an extension standing at an angle to the shank of the hook, of a plunger to push the paper into the roller slot and a keeper mounted on the plunger or connected therewith to move vertically and engaging the said extension and shank of the hook to impart a swinging motion to the latter to lock and unlock the said roller, substantially as shown and described.

7. An attachment for paper trimming machines, comprising the frame having standards provided with open slots at their upper ends at an angle one to the other, the longitudinally slotted winding roller mounted in the said standards and provided at one end with a squared portion, a plunger movable toward and from the roller to push the paper into its slot, a pivoted hook movable across one end of the roller when the plunger moves toward it and actuated from the said plunger, a fork projecting up from the plunger to engage the squared portion of the roller, and an operating shaft for the plunger, substantially as described.

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Witnesses:
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