H. L. Todd. Wall Paper Trimmer.

No. 118,985. Patented Sep. 12, 1871.

Fig. 1

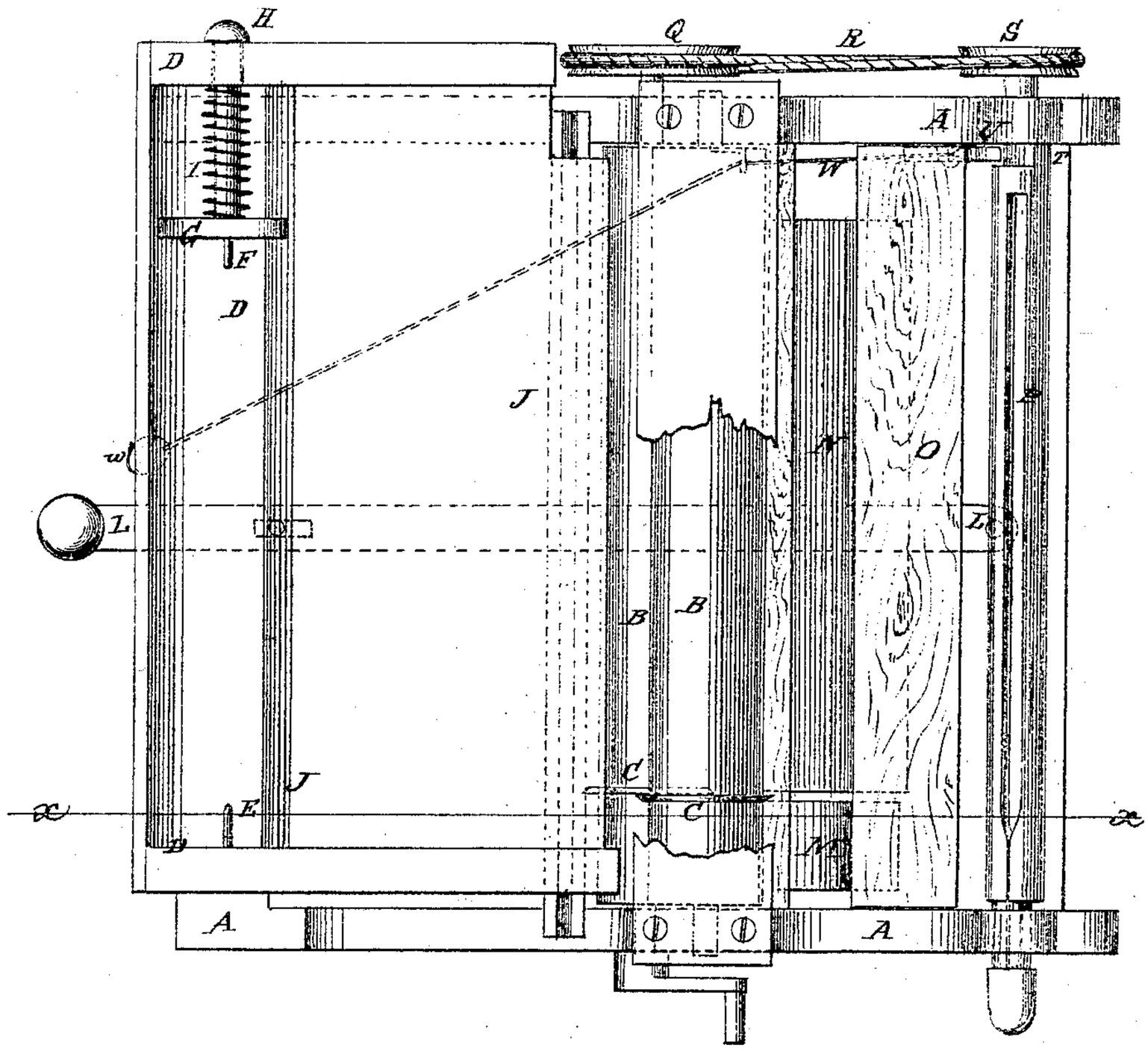
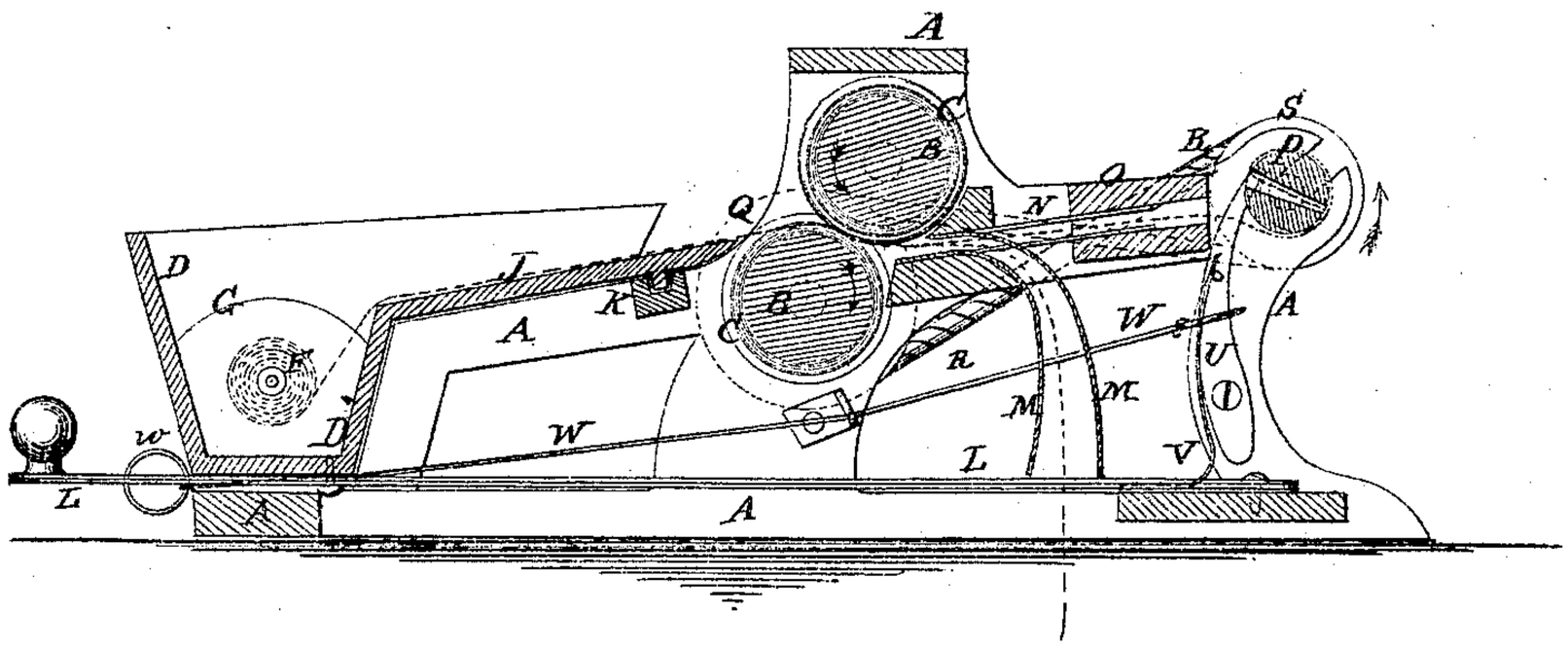


Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

HERBERT L. TODD, OF CORNING, NEW YORK.

IMPROVEMENT IN PAPER-TRIMMING MACHINES.

Specification forming part of Letters Patent No. 118,985, dated September 12, 1871.

To all whom it may concern:

Be it known that I, HERBERT L. TODD, of Corning, in the county of Steuben and State of New York, have invented a new and useful Improvement in Wall-Paper Trimmer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a top view of my improved machine, part being broken away to show the construction. Fig. 2 is a detail vertical section of the same taken through the line *x x*, Fig. 1.

My invention has for its object to furnish an improved machine for trimming wall-paper, which should be simple in construction, effective in operation, and easily operated and controlled; and it consists in the construction and combination of various parts of the machine, as hereinafter more fully described.

A is the main frame of the machine, to the middle part of which are pivoted the journals of the rollers B, to which, near one end, are attached the knives C, by which the trimming is done. The upper roller B is arranged a little in the rear of the vertical plane of the other or lower roller. This arrangement not only enables the end of the paper to be more readily introduced between them, but also and especially enables the point where the knives are acting upon the paper to be readily seen by the operator to enable him to control the trimming with more exactness. The rear part of the top of the frame A is cut away or recessed to receive the trough D, in which the roll of paper to be trimmed is placed, one end of said roll being placed upon the point or spindle E attached to the end of the trough D, and its other end being placed upon a point or spindle, F, attached to the cross-partition or block G. To the opposite side of the partition or block G is attached a guide-rod, H, which passes through a hole in the end of the trough D, and has a head upon its outer end to prevent it from being drawn through the end of the said trough. The partition or block G is held inward by a spring, I, coiled around the rod H, and which should have sufficient force to securely support the end of the roll of paper. To the top of the forward side of the trough D is attached an apron, J, which extends forward to, or nearly to, the lower roller B to support the paper while passing from the trough D to the rollers B, and thus enable it to be more easily guided and controlled while being trimmed. The trough D and apron J have a movement upon the frame A parallel with the rollers B, and are kept in place while being moved back and forth by tongues, blocks, or pins and grooves, as shown at point K in Fig. 2. The trough D is moved to guide the paper by the lever L, the forward end of which is pivoted to the forward part of the frame A, and which is connected with the bottom of the trough D by a screw or bolt which passes through a short slot in the said lever. The rear end of the lever L projects at the rear side of the machine, and may have a knob or other handle attached to or formed upon it for convenience in operating it. As the paper passes out from between the rollers B the cut off margin passes between the curved guides M, which guide it out through the bottom of the frame A. The body of the paper passes between the guides N and O, which are arranged to guide it into the slot in the roller P, which slot is made hopper-shaped, or wider at one side than the other, so that the end of the paper may more readily pass through it. One journal of the roller P revolves loosely in a bearing at one end of the rear side of the frame A. The other end of the roller P is split, so that the paper that has passed through the slot in said roller may slip out as the roll is slipped from said roller. The split end of the roller P is secured by a tube, which not only secures the said split end, but also serves as a bearing for said end, and works in a notch or slot in the end of the rear part of the frame A. This allows the split end of the roller to be easily detached for convenience in removing the trimmed roll of paper from said roller. The machine is driven by a crank attached preferably to the projecting journal of the right-hand end of the lower roller B. To the projecting journal of the left-hand end of one of the rollers B, preferably the lower one, is attached a pulley, Q, around which passes a band or belt, R, which passes around a pulley, S, attached to the journal of the roller P, so that the said roller P may be revolved to roll up the trimmed paper by the revolution of the rollers B. If the pulley Q be attached to the journal of the lower roller B the band R should be crossed; but if said pulley Q be attached to the journal of the upper roller B the band R should be straight. With this arrangement it is neces-

sary that the roller P should be held stationary, when the machine is first started, until such time as the end of the trimmed paper may pass to and enter the slot in the roller P and project some two or three inches beyond said roller. To accomplish this a single-toothed ratchet-wheel, T, is formed upon or attached to its end, upon which the pawl U takes hold, and which should be so arranged as to stop the said roller P, with the wide edge of its slot directly opposite the orifice of the guide O, so that the end of the paper must certainly pass into said slot. The pawl U is provided with a spring, V, which holds it against the ratchet-wheel T. To the pawl U is attached the rear end of a rod, chain, or cord, W, which passes through guides attached to the frame A and to its rear end, which projects at the rear side of the machine. Near the rear end of the lever L is attached or upon it is formed a ring or loop, W′, to receive a finger of the hand that operates the said lever L, so that the pawl U may be conveniently withdrawn at the proper time to allow the roller P to be revolved to roll up the paper. The guides N that receive the paper as it issues from the rollers B are stationary. The ends of the rear guides O enter and slide in grooves in the inner sides of the side parts of the frame A, and the opening through which the paper passes is made so large that the said guides may be moved back upon the guides N.

With this construction, when the machine is started the guide O is moved back so that its forward edge is close to the roller P. As the paper is rolled upon the roller P the increasing roll of paper pushes the guide O back, and thus makes room for itself.

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

1. The stationary guide N and movable guide O, in combination with the rollers B to which the knives C are attached, and with the frame A and slotted roller P, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the curved guides M with the rollers B to which the knives C are attached, substantially as herein shown and described, and for the purpose set forth.

3. The combination of the pawl U, spring V, and rod, chain, or cord W with the slotted roller P and frame A, substantially as herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me this 17th day of May, 1871.

HERBERT L. TODD.

Witnesses:
JAMES T. GRAHAM,
T. B. MOSHER.