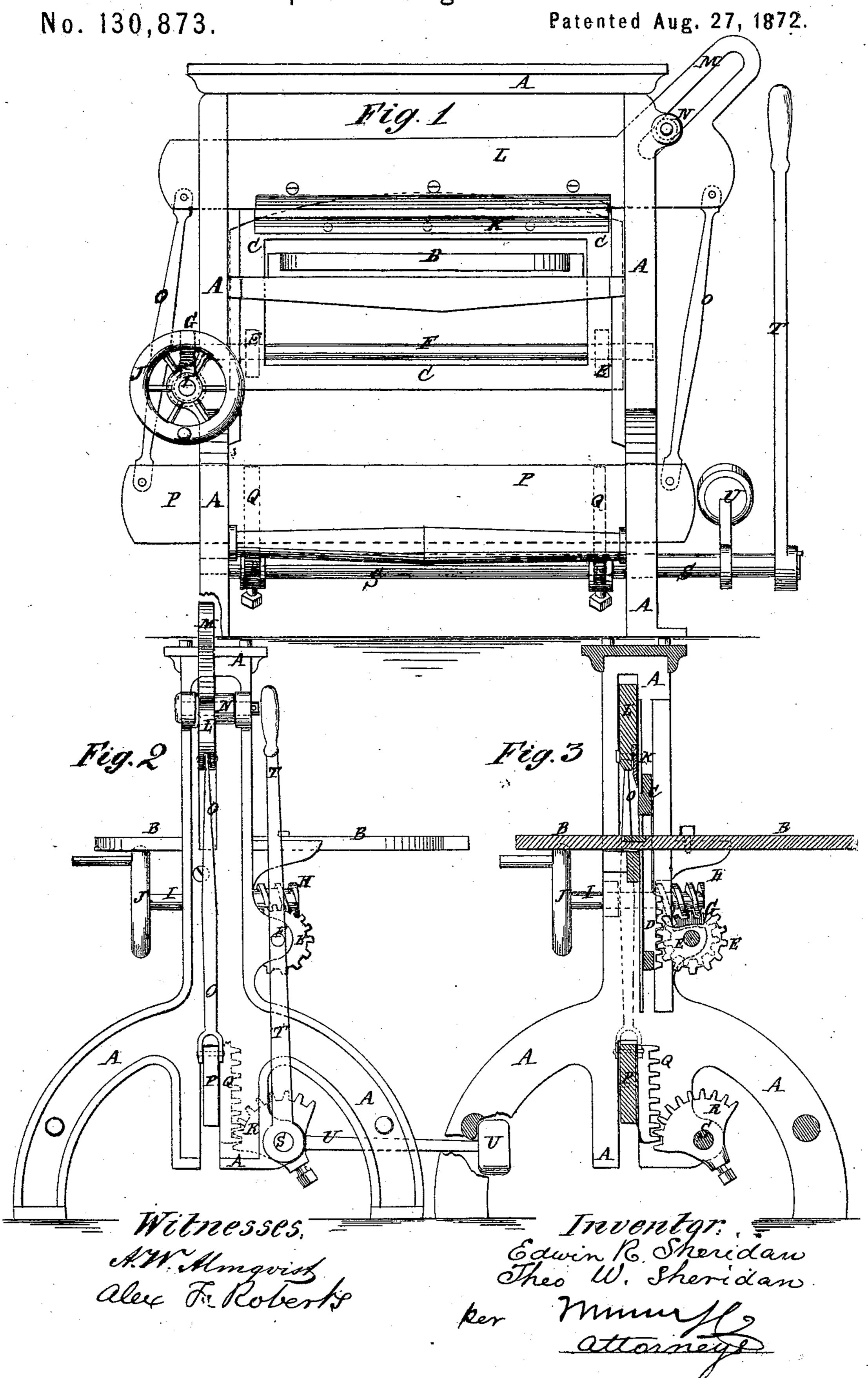
E. R. & T. W. SHERIDAN. Paper-Cutting Machine.



United States Patent Office.

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IMPROVEMENT IN PAPER-CUTTING MACHINES.

Specification forming part of Letters Patent No. 130,873, dated August 27, 1872.

Specification describing a new and useful Improvement in Paper-Cutting Machines, invented by Edwin R. Sheridan and Theodore W. Sheridan, of New York city, in the county and State of New York.

In the accompanying drawing, Figure 1 is a front view of our improved machine. Fig. 2 is an end view of the same. Fig. 3 is a detail vertical cross-section of the same.

Similar letters of reference indicate corre-

sponding parts.

Our invention has for its object to improve the construction of hand-lever paper-cutting machines so as to make them more convenient in use and more effective in operation; and it consists in the construction and arrangement of the various parts of the machine, as

hereinafter more fully described. A is the frame of the machine. B is the table upon which the paper is laid to be cut, and which should be provided with guides and gages in the ordinary manner. C is the frame by the upper bar of which the paper is held while being cut, and which moves up and down in ways in the frame A. Upon the side bars of the frame C are formed teeth D, into which mesh the teeth of the gear-wheels E attached to the shaft F, which revolves in bearings in the frame A. To one end of the shaft F is attached a screw-wheel, G, the teeth of which mesh into the threads of the endless screw H formed upon the cross-shaft I, which revolves in bearings in one end of the frame A, and to the forward end of which is attached a hand or crank wheel, J, for operating it to clamp or release the paper. K is the knife, which is bolted to the bar L, that moves up and down in slots in the frame A. Upon the upper edge of one end of the bar L is formed an upward projection, M, in which is formed an inclined slot, through which passes a roller, N, which is pivoted to the frame A, and the

effect of which is to give a longitudinal movement to the bar L and knife K as they move up and down. To the ends of the bar L, at the ends of the frame A, are pivoted the upper ends of two connecting-bars, O, the lower ends of which are pivoted to the ends of the bar P, which passes through and moves up and down in a slot in the lower part of the frame A. To the side of the bar P, within the frame A, are attached two racks, Q, into the teeth of which mesh the teeth of two segments of gear-wheels, R, attached to the shaft S, adjustably, as shown in Figs. 1, 2, and 3. One end of the shaft S projects at the end of the frame A, and to it is attached the hand-lever T, by which the machine is operated to make the cut. To the projecting end of the shaft S is also attached a weighted lever, U, as shown in Figs. 1 and 2.

By this construction, by drawing the free end of the hand-lever T forward the knife will be drawn down with great force, and when the hand-lever T is released after making a stroke the weighted lever U will carry it back, raising the knife ready to make another stroke.

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

The arrangement of the knife-bar L, pivoted connecting-bars O, base-bar P, racks Q, gear-segments R, shaft S, hand-lever T, and weighted lever U with respect to each other and to the frame A and table B, substantially as herein shown and described, and for the purpose set forth.

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