2 Sheets—Sheet 1.

J. S. YOUNG.

Paper-Feeding Device.

No. 218,355. Patented Aug. 5, 1879.

Fig. 1.

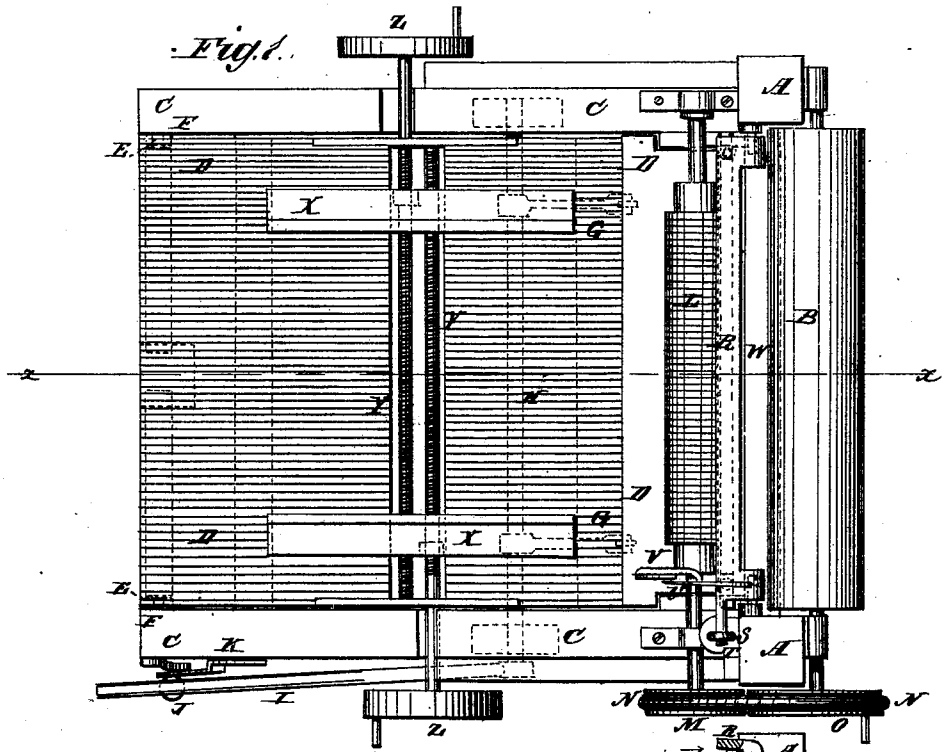
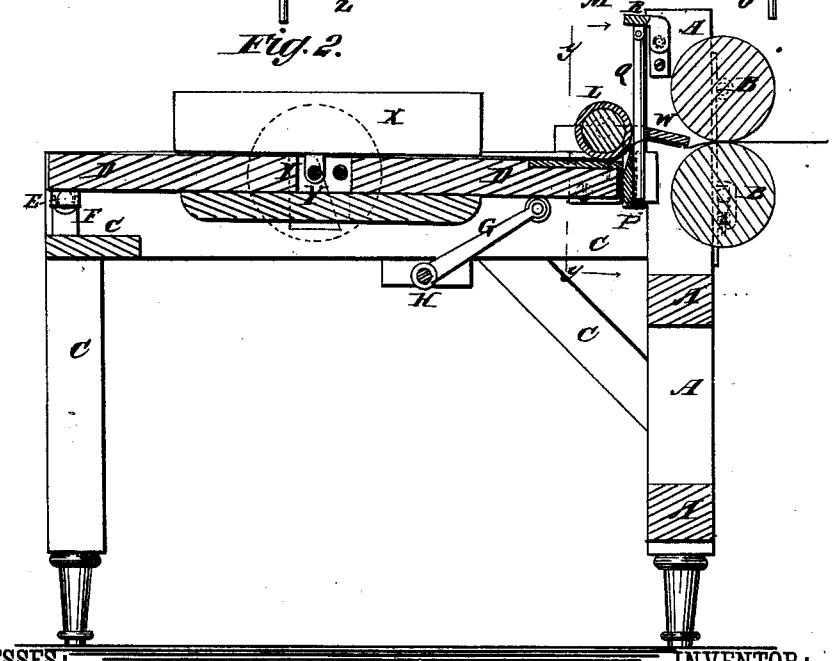


Fig. 2.



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2 Sheets—Sheet 2.

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Fig. 3

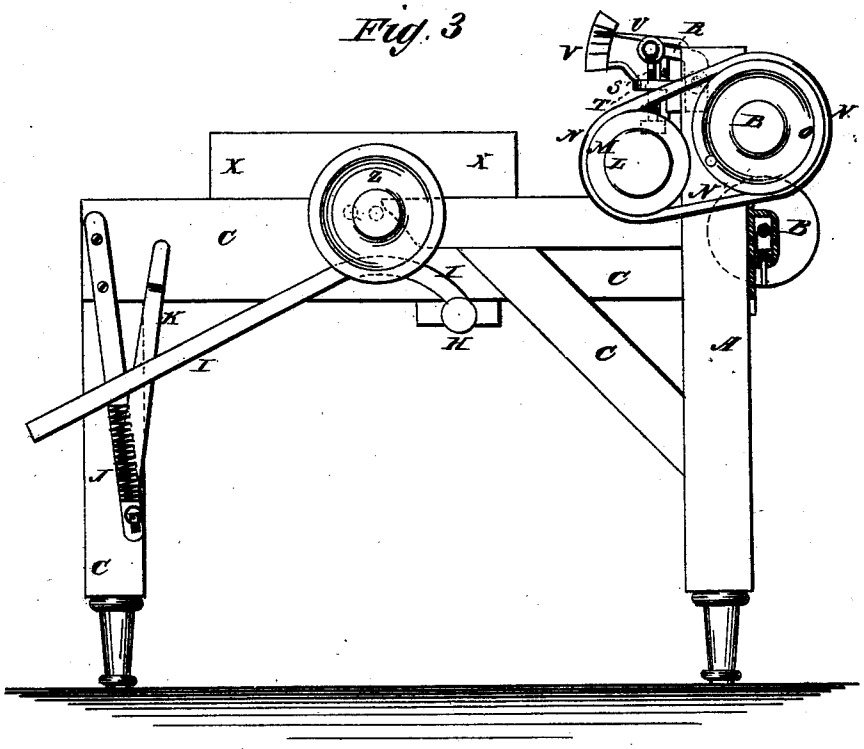
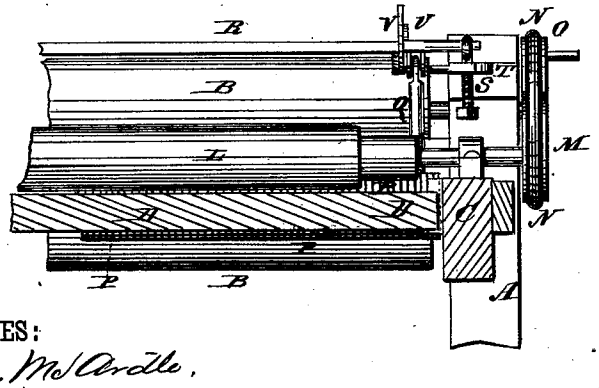


Fig. 4



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UNITED STATES PATENT OFFICE.

JOHN S. YOUNG, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PAPER-FEEDING DEVICES.

Specification forming part of Letters Patent No. **218,355**, dated August 5, 1879; application filed December 17, 1878.

To all whom it may concern:

Be it known that I, JOHN S. YOUNG, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Paper-Feeding Devices, of which the following is a specification.

Figure 1, Sheet 1, is a top view of my improved machine. Fig. 2, Sheet 1, is a vertical longitudinal section of the same, taken through the line *x x*, Fig. 1. Fig. 3, Sheet 2, is a side view of the same. Fig. 4, Sheet 2, is a detail sectional view, taken through the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device for feeding paper to ruling-machines, which shall be simple in construction, convenient in use, and reliable in operation, feeding the paper to the machines one sheet at a time and continuously, and which may be readily adjusted to feed thicker or thinner paper, as may be required.

The invention consists in combining a bevel-piece, arms, a pivoted bar, and screws in a feeding device for paper-ruling machines, as hereinafter described.

A represents the end part of the frame, and B the feed-rollers, of a ruling-machine, about the construction of which parts there is nothing new. To the end part, A, of the ruling-machine frame is attached the frame C of the feeding device.

D is the table of the device, to the outer or rear corners of which are attached gudgeons E, which rest and work in half-bearings F, attached to the outer corners of the frame C. The forward part of the feed-table D rests upon friction-rollers pivoted to the ends of two arms, G, rigidly attached to the shaft H, which works in bearings attached to the under sides of the side bars of the frame C.

To one end of the shaft H is attached the end of a lever, I, to the outer end of which is attached the end of the spiral spring J. The other end of the spring J is indirectly attached to the frame C, so that the tension of the said spring may hold the inner end of the feed-table D pressed upward against the feed-roller.

To the side of the frame C is indirectly attached a spring-catch, K, to receive and hold the outer end of the lever I when raised to lower the inner end of the feed-table D and allow the pile of paper to be conveniently inserted between it and the feed-roller.

L is the feed-roller, which is covered with rubber, and its journals revolve in bearings attached to the frame C.

To one of the journals of the feed-roller L is attached a pulley, M, around which passes an endless belt, N. The belt N also passes around a pulley, O, attached to the journal of one of the feed-rollers B of the ruling-machine, so that the feeding device may be driven from the mechanism of the said ruling-machine.

P is a bar, the ends of which are placed in vertical grooves formed in the side bars of the frame C, or in castings attached to the said side bars. The bar P is placed against the inner end of the feed-table D, projects above the said table, and has its projecting part beveled upon the side next the said table.

To the end parts of the bar P are attached the lower ends of two arms, Q, the upper ends of which are hinged to lugs formed upon the lower side of the bar R.

The ends of the bar R are pivoted to the frame A, and with one of said ends is connected a screw, S, which passes through a stationary plate, T, attached to the frame A. The screw S allows the bar P to be raised or lowered to bring its beveled edge closer to or farther from the face of the feed-roller L, according to the thickness of the paper to be fed to the ruling-machine.

To the bar R is attached a finger or pointer, U, which, when the said bar is turned upon its pivot, moves along a scale of division-marks formed upon an index-plate, V, supported from the frame A, so that the bar P can be readily and accurately adjusted according to the thickness of the paper to be operated upon.

W is a plate, the ends of which are attached to the posts of the frame A above the beveled edge of the bar P, and in such a position as to guide the edge of the paper between the feed-rollers B of the ruling-machine.

The paper is placed upon the table D between two guides, X, which rest upon the table D, and have lugs formed upon their lower sides, which project into a transverse

groove or slot in the said table, and have screw-holes formed in them to receive the two screws Y. The screws Y are placed in the groove or slot in the table D, and are swiveled to the said table. The ends of the screws Y project from the opposite sides of the machine, and have cranks or crank-wheels Z attached to them for convenience in turning them. By this construction, by turning the screws Y the guides X may be adjusted toward or from each other, or toward one or the other side of the machine, according to the width of the paper and the position in which it is desired to feed it into the ruling-machine.

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

The combination of the bevel-piece P, the arms Q, the pivoted bar R, and the adjusting-screw S, all constructed and arranged as and for the purpose specified.

JOHN SAMIEL YOUNG.

Witnesses:
DAVID BUIST,
THOS. FLINN.