G. HEROLD & M. C. Le VAN.

REGISTERING APPARATUS FOR PRINTING-PRESSES.

No. 184,869. Patented Nov. 28, 1876.

Fig. I.

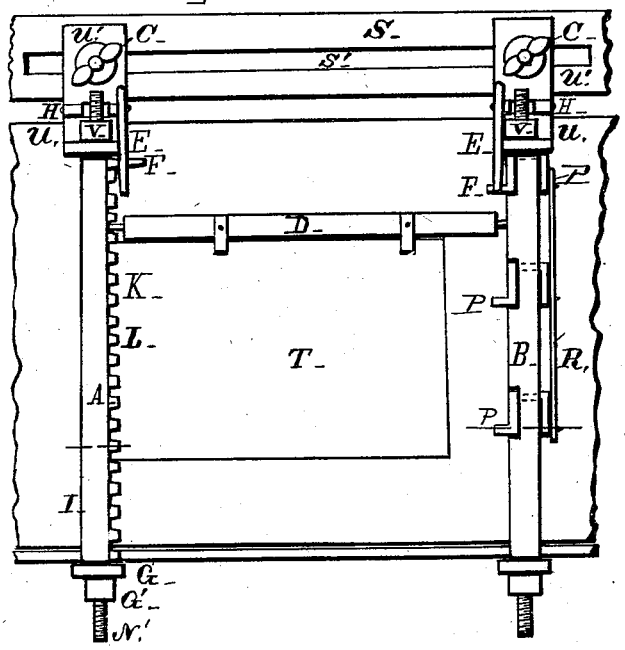

Fig. II.

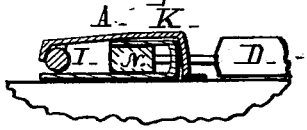

Fig. III.

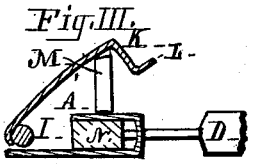

Fig. IV.

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GEORGE HEROLD AND MILTON C. LE VAN, OF KEOKUK, IOWA.

IMPROVEMENT IN REGISTERING APPARATUS FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **184,869**, dated November 28, 1876; application filed April 7, 1876.

To all whom it may concern:

Be it known that we, GEORGE HEROLD and MILTON C. LE VAN, of Keokuk, Lee county, Iowa, have invented a new and useful Improvement in Registering Apparatus for Printing-Presses, made substantially as set forth hereinafter, referring to the accompanying drawings, in which—

Figure I shows a plan of the improved parts; and Figs. II, III, and IV, sections of parts of the same.

This invention consists in the construction and arrangement of guide and nippers for printing-presses, of the style which open and close like jaws to receive and hold the paper.

The press has a part, S, which has a stationary relation to the bed bearing the type, and a platen, T, which is hinged on the side next to part S, and receives the paper. The hinged bars A and B are attached, by screws C at one end, to the part S by means of a slot, S′, by which they can be adjusted sidewise. They lie upon the platen T, and are attached at the other ends by dependent hooks G. These engage under the edge of the platen, and hold solidly to it. The bar A has a rod, N, forming its main part. This passes through the hook G, and has a screw-nut, G′, which holds the hook solidly. This rod passes through the part U at its other end, and is held by a screw-nut, V. The part U is hinged to the part U′ by the hinge H.

The rod N forms the guide for the edge of the paper. To its opposite side is hinged a nipper part, K, at I. This reaches over the rod N with nipper-points L arranged to rest on top of the paper to gripe and hold it while being printed. This part K reaches nearly or entirely the full breadth of the platen-face. A spring, M, is arranged to hold up the part K, as in Fig. III, so that the paper may be placed in position. The part K has a finger, F, at one end, and part U′ has a finger, E. These fingers engage when the platen rises, so that finger E forces the nipper-points L onto the paper to hold it solidly during the printing.

The bar B is made similar to bar A, except the part K. It has nippers P pivoted to it, as shown in Fig. IV. These are connected by crank-arms to rod R, so as to move together. They are operated by a finger, E, striking one of the points P in the same way as part K, so as to be pressed down onto the paper to hold it. In some cases both bars A B are made alike, and in others with nippers on only one.

The bars A B have holes along their sides, to receive pins on the ends of bar D. This bar is a guide to the lower edge of the paper. It is adjusted up and down by these holes to suit the paper, &c. The screw-nuts on both ends of rod N, and the corresponding part of bar B, enable this bar D to be very nicely adjusted up or down to a closer degree than by the holes, and to be made parallel with the type, &c., bars D of different lengths are used for various sized paper.

The nipper part K has slots in its edge, opposite the holes in the bars, so as to pass the pin on bar D.

The paper is put onto the platen, with one side against bar D, and one against bar A or B as guides. When the platen rises, the nippers catch and hold the paper while printing; then they draw it away and release it.

Modifications can be made in some of the parts.

We claim—

1. The guide-bar, adjustable across the face of the platen, in combination with nippers hinged or pivoted to it, and acting on the edge of the paper along its side, substantially as set forth.

2. The guide-bar D, in combination with a guide-bar, provided with holes along its side for holding adjustably one end of bar D, the other end of which is supported at the opposite side of the platen, substantially as set forth.

3. The guide-bar D, in combination with a guide-bar holding one end of bar D, and provided with screw-nuts for adjusting sidewise the bar D, the other end of which is supported at the opposite side of the platen, substantially as set forth.

4. The guide-bar, with nippers hinged or pivoted to it, in combination with guide-bar D, held by it at one end, and having its other end supported on the opposite side of the platen, substantially as set forth.

5. The guide-bar having a hinge, H, in com-

bination with nippers borne by it, and the operating fingers E F, substantially as set forth.

6. The combination of a guide-bar, the nippers hinged or pivoted to it, the spring to operate the nippers, the fingers E F, the adjusting-screws G′ and V, and the connections for holding guide-bar D, substantially as set forth.

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