(No Model.)

R. H. INGERSOLL & P. B. HENRY.

ROTARY HAND NUMBERING AND PRINTING MACHINE.

No. 345,697. Patented July 20, 1886.

Fig. 1.

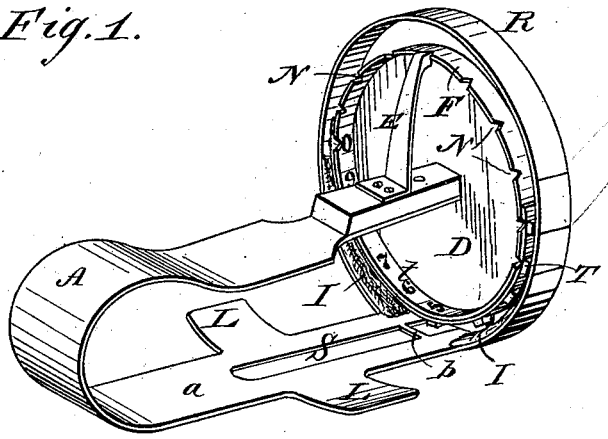


Fig. 2.

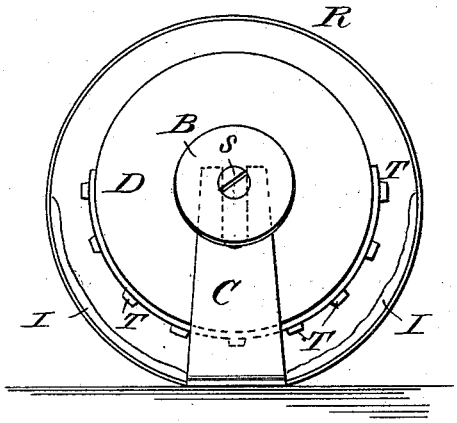


Fig. 3.

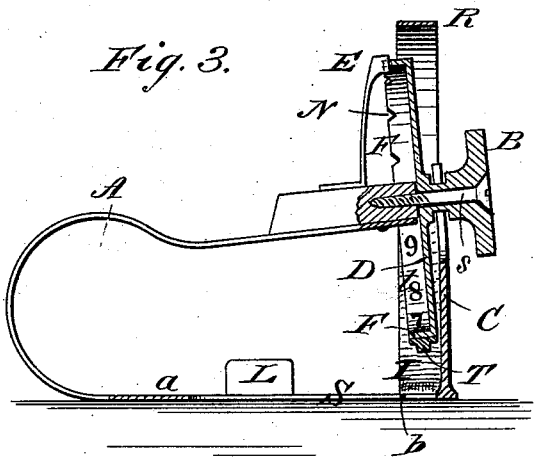
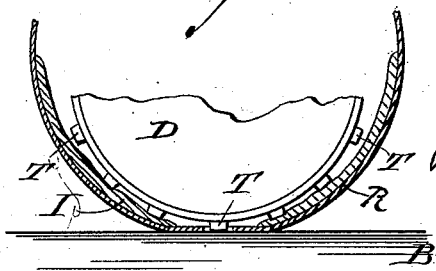


Fig. 4.



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UNITED STATES PATENT OFFICE.

ROBERT H. INGERSOLL AND PHILIP B. HENRY, OF NEW YORK, N. Y.

ROTARY HAND NUMBERING AND PRINTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 345,697, dated July 20, 1886.

Application filed May 7, 1885. Serial No. 164,651. (No model.)

To all whom it may concern:

Be it known that we, ROBERT H. INGERSOLL and PHILIP B. HENRY, citizens of the United States, and residents of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Rotary Hand Numbering and Printing Machines, of which the following is a specification.

Our invention relates to that class of hand printing-machines which are applicable to general use in numbering and lettering goods, tags, labels, invoices, boxes, and any other thing which can be printed on without moving it to the printing-office.

The object of the invention is to construct a machine that will be cheap, small, compact, durable, convenient, and easily managed, and which may be applied to a great variety of work.

The invention consists in the peculiar construction and arrangement of the different elements which constitute the device and their adaptation to the purpose in view, as described and shown in the specification and claims, reference being had to the acccompanying drawings, forming a part of the specification.

In the drawings similar letters indicate corresponding parts in the several figures.

Figure 1 is a perspective view of the machine ready for use, showing the spring, the elastic ring, the inner side of the type-disk with the indicating-figures on the flange, the slot, bar, lugs, and detent. Fig. 2 is an end view showing the outside of the type-disk, the elastic ring, inking-pads, slotted standard, and the button for operating the type-disk. Fig. 3 is a sectional view showing the screw which attaches the type-disk and button to the end of the spring, and the slot in the standard, which serves as a guide in the vertical motion of the type-disk. Fig. 4 is a sectional detail view showing the inking-pads on the inner side of the elastic ring when the types come in contact with them in the operation of printing.

In the drawings, A represents a sugar-tongs-shaped metallic flexible spring, one end of which, *a*, constitutes the base of the machine. This base is provided with a slot, S, through which the paper or other substance to be operated on may be seen, and a bar, *b*, which serves as a guide for spacing, and has fixed to its outer end a slotted standard, C, and a flat elastic ring, R, provided on its inner surface, on each side of the slotted base, with an inking-pad, I. The base is also provided with lugs L, for the purpose of readily holding the machine in place while in use. If desired, the base *a* may be broadened and the lugs dispensed with. The other or free end of the spring A is attached to a circular flanged disk, D, rotating on the end of the spring A as an axis, and held in place by the screw *s*, which passes through the rigidly-fixed button B, which rests, and may be moved up and down freely, in the slot in the standard C, and by means of which the type-disk D may be readily rotated on its axis and also moved vertically. The type-disk D is enough smaller than the elastic ring R to allow of its being rotated within it without coming in contact with its inner surface, except when pressed down in use by means of the button B.

On the outer surface of the flange F of the type-disk D, at the proper distances, are placed types T, representing the figures or letters to be printed with the machine. On the inner surface of the flange, at the same point, are placed said figures or letters *t*, indicating the location of the types. At a point directly opposite each type, on the opposite edge of the periphery of the type-disk, a notch or indentation, N, is made in the edge of the flange, each type having a corresponding notch on the opposite edge of the disk. On the upper side of the free end of the spring A is placed a flexible spring-detent, which presses against the edge of the flange F, and when the disk is rotated engages the notch or indentation N and holds the disk in position while it is being pressed down to print the letter or figure corresponding to the notch. The spring-detent E is made sufficiently flexible to allow the type-disk D to be readily rotated by means of the button B, but rigid enough to produce a distinct click when it engages a notch. The downward motion of the type-disk, which makes an impression of the type which is over the slot S, also presses the types on each side of the center on the inking-pad I, thus

keeping the types ready inked for use. The sides of the slot S serve as a guide for the alignment of the figures or letters, while the bar *b* serves to regulate the spaces.

We do not confine ourselves to the use of figures and letters, as any other designs may be substituted in their place, and the machine may be used as a toy or for general type-writing, and the impressions may be made on paper, cloth, leather, boards, or any other substance.

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

1. A rotary hand numbering and printing machine, consisting of a sugar-tongs-shaped spring, one end of which constitutes the base and supports a vertical standard and inking apparatus, while the other end carries a type-disk and operating mechanism, substantially as described and shown.

2. In a numbering and printing machine, the combination, with the sugar-tongs-shaped spring A, of the elastic ring R, with inking-pads I and slotted standard C attached to one end, and the flanged type-disk D, with guiding-notches N, type T, button B, and flexible detent E attached to the other end, substantially as described and shown.

Signed at New York, in the county of New York and State of New York, this 6th day of May, A. D. 1885.

ROBT. H. INGERSOLL.
PHILIP B. HENRY.

Witnesses:
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