

UNITED STATES PATENT OFFICE.

JONATHAN K. RUKENBROD, OF SALEM, OHIO.

IMPROVEMENT IN ADDRESSING-MACHINES.

Specification forming part of Letters Patent No. 121,900, dated December 12, 1871.

To all whom it may concern:

Be it known that I, JONATHAN K. RUKENBROD, of Salem, in the county of Columbiana and State of Ohio, have invented a new and useful Improvement in Machines for Addressing Newspapers, of which the following is a specification:

My invention consists in a newspaper-addressing machine operated by a hand-lever, its several parts being peculiarly constructed, as hereinafter more fully described.

In the accompanying drawing, Figure 1 is a perspective view of my improved machine. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a transverse section, and Fig. 4 is a detached view of three of the type-cogs, by means of which the type-galley is moved forward.

The object of my invention is to produce a small machine in compact form, operated by hand, and of so little cost as to be within the reach of the smallest newspaper office. It consists of a box, A, open at each end, which may be temporarily or permanently attached on any table or other suitable place. Within this box freely slides a galley, B, closed at both ends, one end forming a removable bearing for a thumb-screw, C, by means of which and a follower, c, the type D is locked in the galley. Near one end of the box A, and on its outside, are pivoted the two prongs E of the forked lever F in such a manner as to allow this lever a free up-and-down motion in line with the longitudinal center of box A. This lever F is formed of peculiar shape. Its prongs E are curved first upwardly and then again downwardly to such a distance as to allow the attachment at that point of a platen, G, and terminates from there in a handle, H, slightly inclined upwardly to permit its being depressed without the hand of the operator coming in contact with the galley or box. Between the prongs E of the lever, and at a suitable distance above their pivots, is secured a rod, I, provided with a recess in which a sleeve, J, rocks freely, which sleeve holds an arm, K, by means of a thumb-screw, L. This recess is formed on the rod I at such a place that the arm K rests on the type at one side of the galley. As the lever F is elevated its curved prongs E are moved back, thereby drawing back the rod K. The type D is set in the galley to form the addresses and any other desired information, and at a suitable distance from each other. At the end of each line of type

is set what I call a type-cog; being a cog-tooth, a, provided with a beveled face, b, cast or otherwise formed with a body, c, like ordinary type. In Fig. 4 I have shown three different-sized type-cogs to suit addresses of different lengths. These type-cogs are all set in line with each other at one side of the galley and directly under the arm K, their beveled faces b allowing the end of the arm to slide over them as it is moved back on raising the lever F, but presenting a straight rear face to the arm when the latter is moved forward again by the depression of the lever, thus allowing the arm to push the galley along the distance of its own movement. For a suitable distance under the lever F the galley with its type is covered by a flexible shield, M, preferably made of a thin sheet of India rubber, secured at its outer end to the upper edges of the sides of box A, but free at its other end, and provided with an oblong opening, L², to allow the platen G to pass through, and allowing but one address of the galley to appear under it.

The several parts are so arranged that when the lever F is depressed the galley is moved such a distance by the arm K as to bring the next address under the opening L of the flexible shield M and the platen G. This movement of the arm K is made possible under the shield by reason of the latter being made flexible; for if it were made of metal and rigid the arm K, lifting the shield in its forward movement, would also lift the paper away from the type and thus effectually prevent an impression. This platen may be made adjustable laterally by means of a dovetail groove or slot in the lever, in which the corresponding head of the platen slides freely, and may be held in any desired position by means of a set-screw or other suitable device when properly adjusted for the type below it. It is covered at its point of contact with the type by a piece of thin India rubber or other flexible material, by means of which not only a better impression is obtained, but also the type protected against injury from too hard pressing down of the lever. The type is securely held locked in the galley by means of a thumb-screw, C, acting against a follower, c, and where it is desirable to use a small machine a sufficient number of galleys may hold the addresses permanently and be operated through case A, one after the other, addresses being readily changed in the separate galleys by loosening

thumb-screw C, changing the type, and again locking it by the thumb-screw; and as each address carries its own and only one cog-type, each galley has always the requisite number of cog-teeth—no more and no less. For the sake of greater strength, I prefer cutting or stamping or otherwise forming these cog-types of steel, as cast type-metal cog-teeth are very apt to break, especially when the machine is operated quickly. To prevent the arm from passing over more than one cog-tooth on its backward movement the rod I is caused to strike upon a stop or projection, N, so arranged as to arrest the upward movement of the lever at the moment when the arm K has fallen behind one of the cog-teeth, thus preventing the lever from being elevated beyond a certain distance, and thus also effectually preventing any further backward movement of the arm. The platen G may be held in a position out of contact with the type on the galley when at rest by means of a spring or springs suitably arranged to give an elevating tendency to the lever F. While the lever F and platen are raised the paper or wrapper on which the address is to be printed is placed upon the shield M over the opening L and directly under the platen. As the lever is depressed the arm K pushes the galley along, bringing the desired address directly under the opening L and the descending platen G, when by a gentle pressure on the lever the

printed impression is made on the margin of the newspaper or its wrapper. The type is inked before the galley is placed in the box A, and the rod K, elevating the shield M during its forward and backward movement, prevents the latter from coming in contact with the type and wiping off the ink. The thumb-screw C holding the type and cog-teeth firmly in place, no lateral movement and consequent shaking of the same is possible.

Having described my invention, I claim—

1. The arrangement of the adjustable feeding-arm K upon the rod I, between the prongs of the lever F, and in such relation to the ratchet-teeth *a* and the loose flexible shield M as to be operated by the movement of the hand-lever F directly beneath the shield, which is held by said feeding-arm above the type and conforms to the movement of said arm, as shown and described.

2. The arrangement of the rod I with respect to the pivots of the hand-lever F, and the stop N, located upon the box A in the rear of said pivots, as to utilize the same device which carries the feeding-arm to also limit the ascent of the hand-lever, as shown and described.

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Witnesses:

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