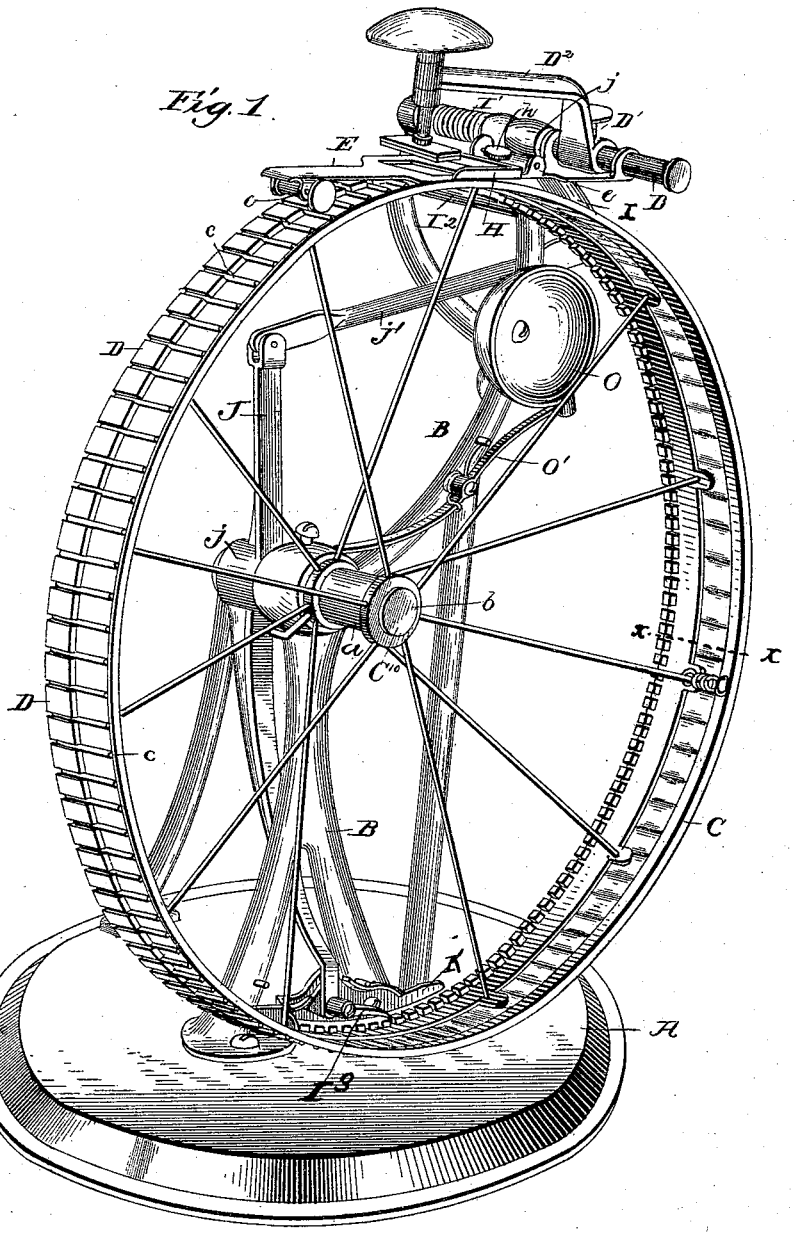
(Model.) 3 Sheets—Sheet 1.

G. S. COUCH.

ADDRESSING MACHINE.

No. 455,814. Patented July 14, 1891.

Fig. 1.



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(Model.) 3 Sheets—Sheet 2.

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Fig. 2

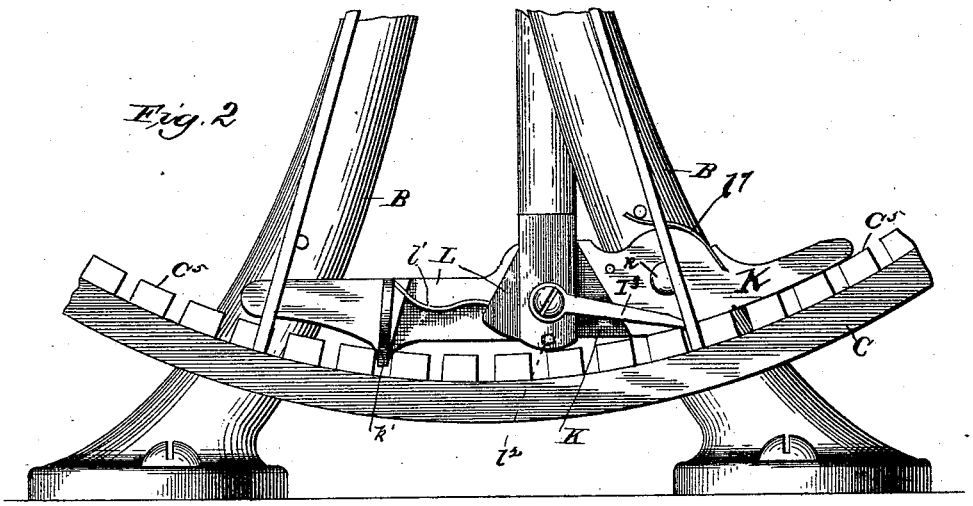


Fig. 3

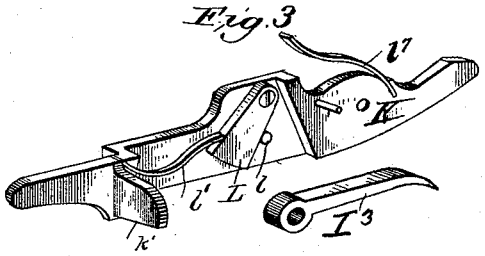
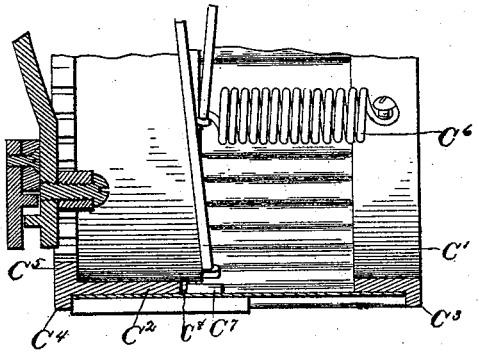


Fig. 4



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G. S. COUCH.

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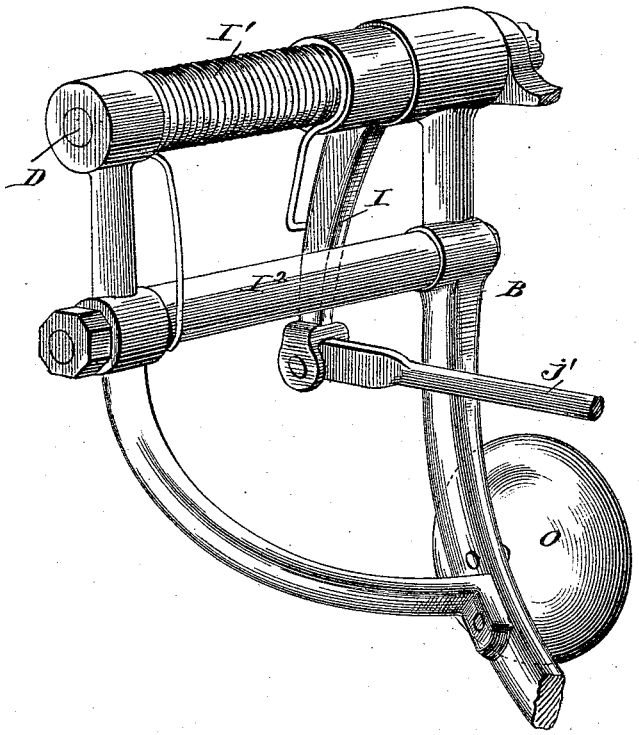
Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE SUMNER COUCH, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO THE COUCH ADDRESSER COMPANY, OF MINNESOTA.

ADDRESSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 455,814, dated July 14, 1891.

Application filed July 19, 1890. Serial No. 359,243. (Model.)

To all whom it may concern:

Be it known that I, GEORGE SUMNER COUCH, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Addressing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to addressing-machines.

It has for its object to provide a machine of this character which may be rapidly operated and which will be simple and strong in construction, durable in use, and comparatively inexpensive of production.

With these objects in view the invention consists in certain features of construction and combination of parts which will be hereinafter fully described and claimed.

In the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, Figure 1 is a perspective view of my improved addressing-machine. Fig. 2 is a side view of a portion of the cylinder or drum, the vertical support, and ratchet mechanism. Fig. 3 is a detail perspective of the ratchet mechanism, showing the parts separated. Fig. 4 is a sectional view on line *x x*, Fig. 1; and Fig. 5 is an enlarged detailed perspective of parts.

A represents the supporting-base, upward from which projects the supporting-post B, having a laterally-extending arm *b*. A cylinder or drum C is journaled in the supporting-post at *a*. The face of this cylinder is divided into cells by ribs *c*, into which cells are located slugs or plates D, each of which bears upon its face a suitable inscription—as, for instance, the name and address of a person. This drum or cylinder consists of two parts C′ C². The part C′ has an annular collar or flange C³ at its edge, and the part C², which is embraced by the part C′, has a similar flange or collar C⁴ and an internal gear-wheel C⁵. Between these flanges or collars the slugs are securely held, it being understood that I may arrange lengthwise of each cell as many slugs as desired. The parts C′ and C² of the cylinder are held together by springs C⁶, which, when it is desired to separate the parts for any reason, may be disengaged therefrom. To prevent any slipping movement of the parts C′ C², I provide one with a short arm C⁷ and the other with a slot C⁸ to receive the short arm, as shown in Fig. 4. A nut C¹⁰ holds the said cylinder or drum removably to its shaft. Supported in the upper end of the laterally-extending support B is a grooved shaft D, in which groove is keyed by a set-screw D′ a stamping-arm D², which overhangs the cylinder or drum. Loosely pivoted to this shaft is a combined envelope and ink-ribbon support E, having near its opposite ends bearings *e* for the ink-ribbon rollers, which are provided with a thumb-button, by means of which the ribbon may be wound upon the rollers to present fresh parts to the slugs. It will be obvious that any suitable inking device can be used. The stamping-arm overhangs said ribbon-support above its central aperture for obvious reasons.

A gage H is adjustably secured to the ribbon-support by a set-screw *h*, so that it may be adjusted to accommodate different-sized letters or envelopes to bring the center of the same over the slot in the ribbon-support in order to stamp the envelope on its face at the desired point. An arm I is fixed to shaft D, and connected with said shaft and the arm is a spring I′, which exerts the force to move the arm inward, the said arm being arrested in its inward movement by the stop I², secured to the said lateral support. A lever J is pivoted to the vertical support at *j* and is connected to the short arm I by a rod *j′*. The lower end of this lever has pivoted thereto an operating-pawl I³, which engages the internal gear and rotates it tooth by tooth. A holding-dog K is pivoted at one end to the vertical support at *k*, and is provided with a detent *k′*, which engages the internal gear-wheel C⁵ immediately after the pawl I³ has advanced the cylinder one tooth and prevents the further rotation of said cylinder until the pawl is again actuated. A spring *l′* is arranged to exert its power to force the detent at the inner end of the dog into the notches of the gear-wheel. A plate L is pivoted to the holding-dog and is held pressed against a stop-stud *l* by a spring *l′*. A stud or pin *l²*

projects from the lower end of the lever and engages the plate.

The operation of this mechanism is as follows: When the stamper is depressed, it rocks the grooved shaft which swings the arm I outward, carrying therewith the lever J, thus throwing the lower end of the lever carrying the pawl inward the distance of one tooth. In this inward movement of the lower end of the lever the pin l^2, striking against the under edge of the pivoted plate, swings it inward a distance; but the movement of the said plate being in an arc smaller than the arc described by the lower end of the pawl the said plate drops to its normal position (shown in Fig. 3) at the instant the pawl on the lower end of the lever reaches the next tooth and is assisted in its movement by the spring l'. The hand now being removed from the stamper the spring acts, and in throwing the inner end of the lever outward the stud or pin thereon engages the under edge of the pivoted plate and lifts said pivoted plate with the retaining-dog upward, thus allowing the cylinder to move the distance of one tooth, at which instant the stud or pin rides free of the pivoted plate, and the retaining-dog immediately drops in engagement with the internal gear-wheel, thus checking the movement of the cylinder or drum and preventing it moving more than one tooth's distance. To indicate that the complete circuit of names has been made and it will be necessary to slide the stamper and the envelope-support along its shaft until they overhang the next row of slugs, I provide an alarm-bell O, which is sounded by a hammer operated by an arm O′, secured to some part of the cylinder or drum.

In operation place the envelope or postal-card on the holder, which must be placed in a position so the inking-ribbon carried thereby will cover the letters on the slugs perfectly, and the stamp is given a sharp, quick blow. In changing the cylinder the thumb-screw at the end of the hub is removed and the cylinder placed on a flat surface with the internal gear upward. The springs are now disengaged and the gear-wheel may then be easily removed and the slugs changed, removed, or new ones inserted in the cells of the cylinder or wheel.

Any number of cylinders may be provided for each machine, and the cylinder in the machine may be removed and another loaded with slugs or plates having a different set of names may be substituted.

Having thus described my invention, I claim—

1. In combination, a rotatable cylinder or drum, means for holding slugs thereon, an envelope and inking device support, a shaft for supporting the same, a stamper keyed to said shaft, means for automatically rocking said shaft in a direction opposite the direction caused by the depression of said stamper, a gear-wheel fixed to said cylinder or drum, a dog to engage said gear-wheel and check its rotation, a pawl for engaging said gear-wheel to rotate it tooth by tooth, a lever, and a connection between said lever and the said shaft, said lever connected with the pawl and arranged to operate said dog.

2. In a device of the class described, the combination, with a cylinder provided with a series of cells open at one end, of a collar for closing the ends of said cells, and a spring for uniting said collar to the cylinder, whereby a constant pressure is exerted upon the ends of the slugs arranged in the cells to hold them in position.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE SUMNER COUCH.

Witnesses:
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