(No Model.)

J. P. O'MALLEY.

ADDRESSING MACHINE.

No. 481,052. Patented Aug. 16, 1892.

Fig. 1.

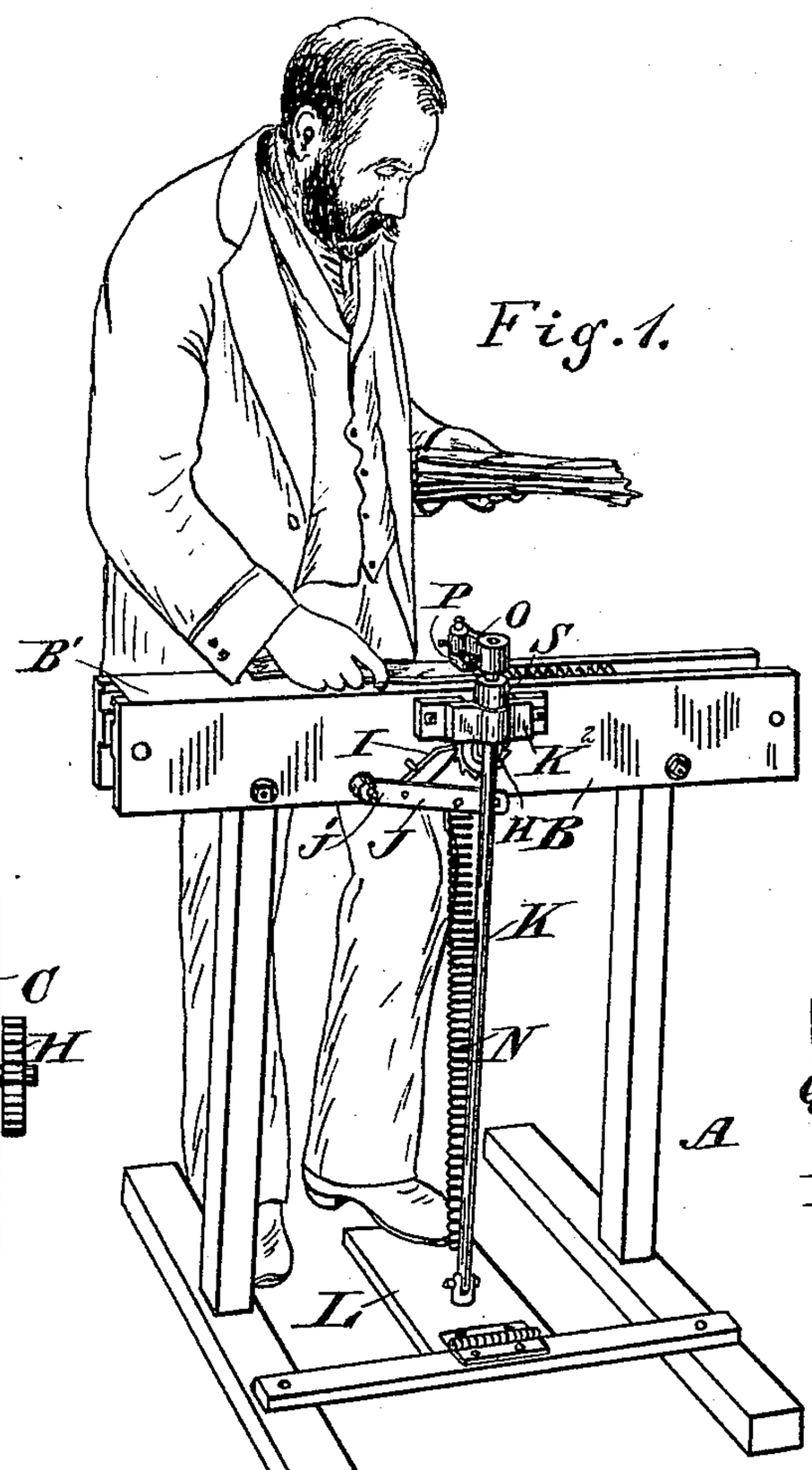


Fig. 2

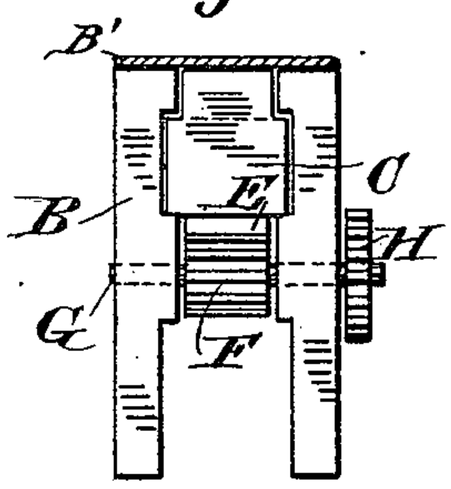


Fig. 4

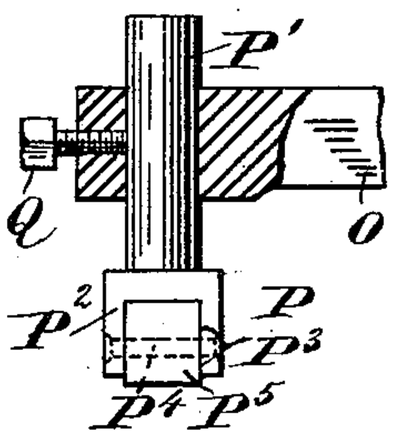


Fig. 3

Fig. 7

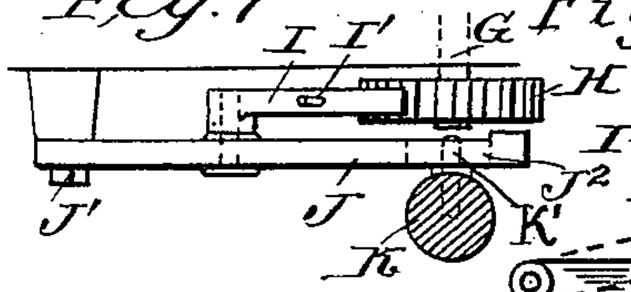


Fig. 5

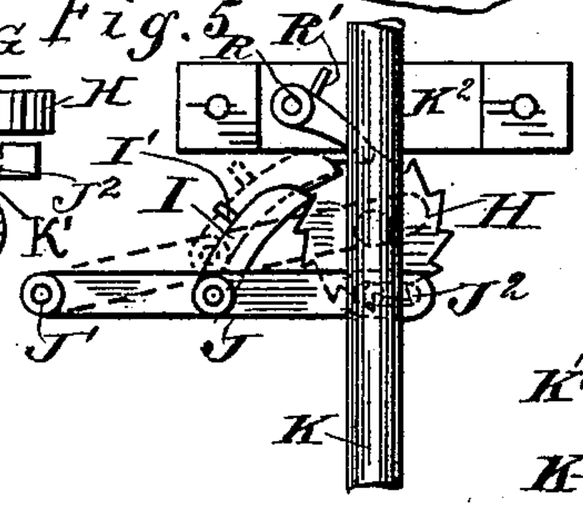
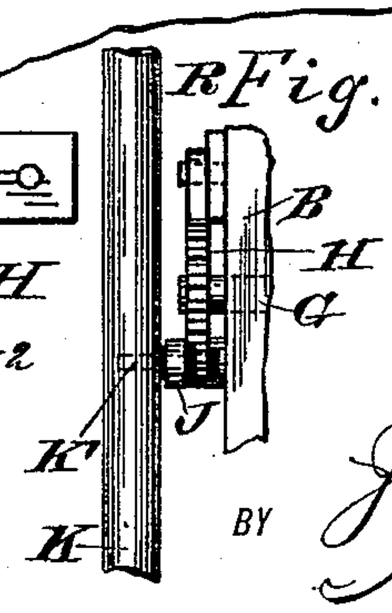


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN P. O'MALLEY, OF MANISTEE, MICHIGAN.

ADDRESSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 481,052, dated August 16, 1892.

Application filed November 7, 1891. Serial No. 411,152. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. O'MALLEY, of Manistee, in the county of Manistee and State of Michigan, have invented a new and Improved Addressing-Machine, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved addressing-machine, which is simple and durable in construction, very effective in operation, and arranged to quickly and accurately print successively a series of adresses without possibility of either missing or passing a name.

The invention consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvements. Fig. 2 is an end view of the carriage and its support. Fig. 3 is a sectional side elevation of the same. Fig. 4 is a side elevation of the impression-block and its support, parts being in section. Fig. 5 is a side elevation of the mechanism for imparting motion to the carriage. Fig. 6 is an end elevation of the same, and Fig. 7 is a plan view of the same.

The improved addressing-machine is mounted on a suitably-constructed frame A, supporting on its upper end a guideway B, in which is mounted to slide longitudinally a carriage C, adapted to support a type-galley D, containing type for printing a series of addresses. On the under side of the carriage C is formed or secured a rack E in mesh with a gear-wheel F, secured on a shaft G, extending transversely and mounted to turn in suitable bearings in the guideway B.

On one outer end of the shaft G is secured a ratchet-wheel H, engaged by a pawl I, pivoted on a lever J, fulcrumed at J′ on one side of the guideway B. The free end of the lever J is formed with a slot J^2, engaged by a pin K′, projecting from a rod K, mounted to slide vertically in a suitable bearing K^2, attached to one side of the guideway B. The lower end of the rod K is pivotally connected with a treadle L, hung on the frame A and under the control of the operator's foot. A spring N is connected at one end with the said treadle L and at its other end with the guideway B, the said spring serving to return the treadle L into an uppermost position after being pressed on and released by the operator's foot. On the upper end of the rod K is secured an arm O, supporting the impression-block P, preferably of the construction shown, being provided with a shank P′, held vertically adjustable in the arm O and adapted to be secured in place by a set-screw Q, screwing in the said arm and against the shank P′.

On the lower end of the shank P′ is formed a head P^2, provided with a groove P^3, engaged by an impression-block P^5, made of rubber or other suitable elastic material, the under side of the said block projecting below the head and being adapted to press the paper in contact with the type in the galley D. The block is fastened in place by pins P^4, passing through the sides of the head P^5. The impression-block P moves downward toward the addresses set up in the galley D, the said block extending transversely close to the front edge of the cover-plate B′, secured to and covering the rear part of the top of the guideway B, as is plainly shown in Figs. 1, 2, and 3.

In order to prevent an accidental return movement of the carriage C, a dog R is preferably pivoted in the bearing K^3 and engages the ratchet-wheel H. The dog R and the pawl I are provided on top with pins or knobs R′ and I′, respectively, for conveniently lifting the said dog and pawl out of mesh with the ratchet-wheel H. This is necessary for quickly returning the carriage C after a galley has been used and a new one is inserted.

On top of the bearing K^2 is arranged a block S, surrounding the rod K and serving to form a stop for the downward motion of the said rod, the arm O striking against the said block, which latter thus serves to limit the downward movement to prevent the impression-block from striking type in the galley in case no paper to be addressed is on the galley and the block is accidentally moved downward.

The operation is as follows: When the device is in a normal position, the treadle L is raised and the impression-block P is in an uppermost position, and when the operator

desires to print an address from the inked type in the galley D he places the paper at the end of the cover B′, so that part of the paper projects over the type bearing the desired addresses. The operator then presses on the treadle L, so that the rod K slides downward and moves the impression-block P in a like direction and in contact with the paper, so as to press the latter firmly on the type. An impression is thus made. As soon as the operator releases the pressure on the treadle L the spring N forces the said treadle and the parts connected with it upward, so that the rod K, the arm O, and the impression-block slide upward and the addressed paper can be removed. On the upward movement of the rod K the pin K′ imparts an upward swinging motion to the lever J, which latter carries along the pawl I, so that a rotary motion is given to the ratchet-wheel H, the latter moving the distance of one tooth. This movement of the ratchet-wheel H causes turning of the shaft G and gear-wheel F, and the latter, on account of meshing with the rack E, moves the carriage C forward the distance between the two sets of addresses on the type-galley D, so that the next following address is now brought directly under the impression-block P at the end of the cover B′. When the rod K moves into an uppermost position the top of the pawl I engages the under side of the bearing K^2, so that the said pawl effectually locks the ratchet-wheel H in place, and consequently prevents the carriage C from being moved too far forward. A return movement of the carriage is prevented by the pawl R engaging the said ratchet-wheel H. The above-described operation is then repeated for printing the second address by the operator pressing on the treadle in the manner specified. When all the addresses contained in the top of the galley D have been printed, then the carriage C is in an outermost position and is then returned by hand to the other side by the operator pushing the carriage backward, the dog R and pawl I being raised, as previously described, by the operator lifting the said pawls by the knobs or pins R′ and I′. A new galley is then inserted and the above-described operation is repeated.

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

1. An addressing-machine comprising a carriage mounted to slide, a type-galley held on the said carriage, a rack arranged on the under side of the said carriage, an impression-block mounted to slide toward and from the face of the said galley, a rod carrying the said impression-block, a spring-pressed treadle connected with the said rod, and a gear-wheel in mesh with the said rack and operated from the said rod to impart a sliding motion to the said carriage on the upward motion of the said rod, substantially as shown and described.

2. In an addressing-machine, the combination, with a carriage mounted to slide and adapted to support a type-galley and a rack held on the under side of the said carriage, of a gear-wheel in mesh with the said rack, a rod mounted to slide vertically, an intermediate mechanism, substantially as described, to connect the said rod with the said gear-wheel to rotate the latter on the upward movement of the rod, and an impression-block held on the upper end of the said rod and adapted to be moved toward the type-galley on the downward stroke of the rod, as set forth.

3. In an addressing-machine, the combination, with a carriage mounted to slide and adapted to support a type-galley and a rack held on the under side of the said carriage, of a gear-wheel in mesh with the said rack, a rod mounted to slide vertically, an intermediate mechanism, substantially as described, to connect the said rod with the said gear-wheel to rotate the latter on the upward movement of the rod, an impression-block held on the upper end of the said rod and adapted to be moved toward the type-galley on the downward stroke of the rod, and a spring-pressed treadle connected with the said rod, as set forth.

4. In an addressing-machine, the combination, with a carriage mounted to slide and adapted to support a type-galley and a rack held on the under side of the said carriage, of a gear-wheel in mesh with the said rack, a ratchet-wheel held on the shaft of the said gear-wheel, a pawl engaging the said ratchet-wheel, a lever carrying the said pawl and having an upward and downward swinging motion, a rod having a pin engaging a slotted free end of the said lever to impart a swinging motion to the same, and a spring-pressed treadle pivotally connected with the said rod, substantially as shown and described.

5. In an addressing-machine, the combination, with a carriage mounted to slide and adapted to support a type-galley and a rack held on the under side of the said carriage, of a gear-wheel in mesh with the said rack, a ratchet-wheel held on the shaft of the said gear-wheel, a pawl engaging the said ratchet-wheel, a lever carrying the said pawl and having an upward and downward swinging motion, a rod having a pin engaging a slotted free end of the said lever to impart a swinging motion to the same, a spring-pressed treadle pivotally connected with the said rod, and a dog engaging the said ratchet-wheel to prevent a return movement, substantially as shown and described.

6. In an addressing-machine, the combination, with a carriage mounted to slide and adapted to support a type-galley and a rack held on the under side of the said carriage, of a gear-wheel in mesh with the said rack, a ratchet-wheel held on the shaft of the said gear-wheel, a pawl engaging the said ratchet-

wheel, a lever carrying the said pawl and having an upward and downward swinging motion, a rod having a pin engaging a slotted free end of the said lever to impart a swinging motion to the same, a spring-pressed treadle pivotally connected with the said rod, and an impression-block held on the upper end of the said rod and adapted to move toward and from the face of the galley supported on the carriage, substantially as shown and described.

7. In an addressing-machine, the combination, with a guideway having part of its top covered by a cover-plate, of a carriage mounted to slide longitudinally in the said guideway, a type-galley supported on the said carriage, a rack secured to the under side of the said carriage, a gear-wheel in mesh with the said rack, a rod mounted to slide vertically and connected with the said gear-wheel to impart a rotary motion to the latter on the upward movement of the said rod, a spring-pressed treadle connected with the said rod, and an impression-block held on the upper end of the said rod and adapted to move toward the said galley at the front end of the said cover-plate, substantially as shown and described.

8. In an addressing-machine, the combination, with a guideway having part of its top covered by a cover-plate, of a carriage mounted to slide longitudinally in the said guideway, a type-galley supported on the said carriage, a rack secured to the under side of the said carriage, a gear-wheel in mesh with the said rack, a rod mounted to slide vertically and connected with the said gear-wheel to impart a rotary motion to the latter on the upward movement of the said rod, a spring-pressed treadle connected with the said rod, and an impression-block held on the upper end of the said rod and adapted to move toward the said galley at the front end of the said cover-plate, and a stop-block for limiting the downward motion of the said rod and impression-block, substantially as shown and described.

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Witnesses:
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