

J. M. KENNARD.
ADDRESSING-MACHINE.

No. 181,270.

Patented Aug. 22, 1876

Fig. 1.

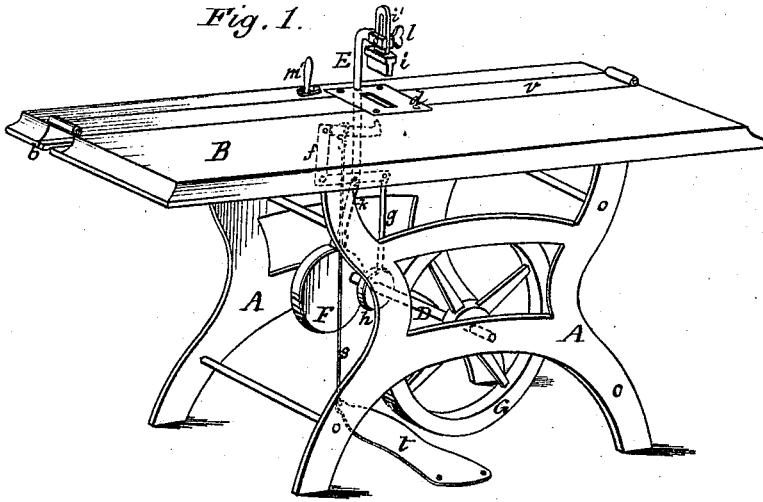


Fig. 2.

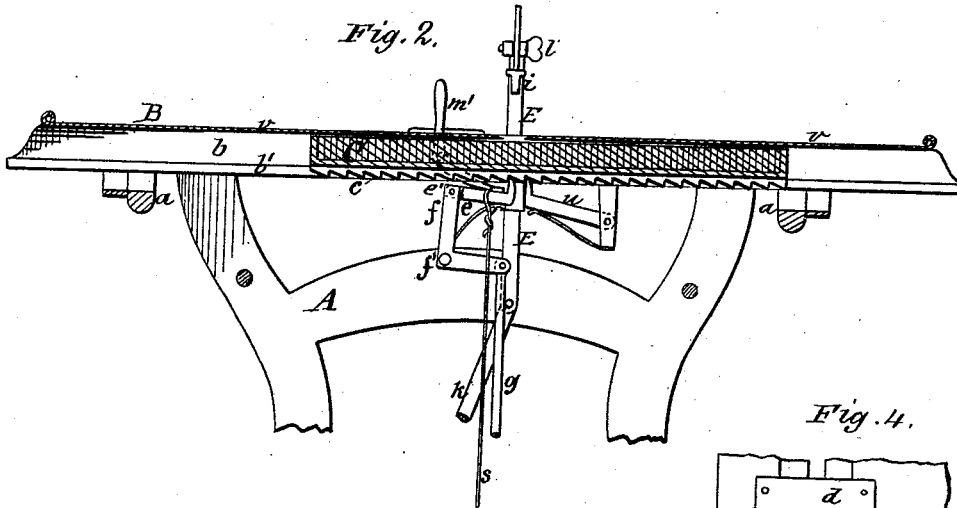


Fig. 4.

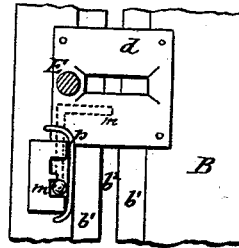
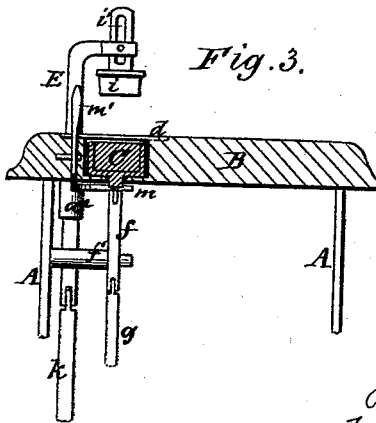


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN M. KENNARD, OF WATERLOO, NEW YORK.

IMPROVEMENT IN ADDRESSING-MACHINES.

Specification forming part of Letters Patent No. 181,270, dated August 22, 1876; application filed June 10, 1876.

To all whom it may concern:

Be it known that I, JOHN M. KENNARD, of Waterloo, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Addressing-Machines; and that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents the machine in perspective. Fig. 2 represents a longitudinal vertical section through the upper portion of the same. Fig. 3 represents a transverse vertical section through the same. Fig. 4 represents in plan a detached view of the machine's locking device.

Similar letters of reference where they occur denote like parts of the machine in all the figures.

My invention relates to that class of addressing-machines in which names and addresses are printed directly on newspapers and periodicals, or their wrappers, and is calculated greatly to facilitate and expedite that operation. For this purpose the names or addresses are set in type, and are inclosed in a galley provided underneath with ratchet-teeth, into which a pawl engages to advance it at intervals.

As it generally happens in newspaper establishments that a large number of addresses must be printed within a very limited time, my machine is intended to be ordinarily operated by steam-power, and, to obviate omissions in printing, the forward motion or feeding of the galley should be instantaneously arrested when there is not any newspaper in position to be printed, and the platen should be easily adjusted to print any thickness of periodicals without impairing its action.

My invention relates to the manner in which the platen is connected to the reciprocating plunger that operates it, so that no amount of twisting produced by attempting to remove newspapers before they are released by the platen, will keep the latter from descending at the next stroke fairly over the opening that discloses the type of the galley. It relates also to a treadle connected with the feeding-pawl, so that the advance of the galley can be

as readily stopped by the foot of the operator, while his hands are engaged in removing and handling the newspapers. It relates also to the mechanism by which the plunger and feeding device are operated, as will be described hereafter with reference to the drawings.

A represents the frame of the machine, that supports a table, B, upon which the newspapers to be addressed are deposited. This table B is provided with a recessed groove, *b*, to receive the galley C, which is supported within said groove *b* by shoulders *b*¹, extending a short distance within it, so as to leave a narrow longitudinal central opening, *b*², for the free passage of the ratchet-teeth *c* formed upon the bottom of the galley. The portions of the table upon each side of the groove *b* are connected underneath by bent braces *a*, near each end, while they are united above by the shield *d*. The galley is advanced by means of a spring-pawl, *e*, that engages with its ratchet-teeth *c*. This spring-pawl is pivoted at *e*¹ to one end of a bell-crank lever, *f*, which is in its turn pivoted to the frame A at *f*², while its opposite end is connected by means of the rod *g* to the strap of an eccentric, *h*, of the rod *g* to the strap of an eccentric, *h*, mounted upon the driving-shaft D. The plunger E, that carries the platen *i*, moves up and down through suitable guides *a*² attached to the table. It is operated through the rod *k*, connected to the strap of an eccentric, F, also mounted upon the driving-shaft D. The stem of the platen *i* is flattened out, and is provided with a slot, *i*¹, for the passage of the body of the thumb-screw *l* that clamps the platen rigidly to the head of the plunger. The stem of the platen being clamped on both sides of the groove *i*¹, it cannot turn in its socket, as a cylindrical stem would, under the side impulse communicated to it by removing the papers before they are fairly released, incident to the hurry in which the machine is operated.

To arrest the advance of the galley, the pawl *e* is depressed and disengaged from the teeth *c* of the galley, by a controlling-lever, *m*, pivoted to the table, said lever having an operating handle, *m*¹, located above the table, and close to the plunger E, where the operator can most readily grasp it. The lower end *c*

the lever *m* is bent under the table, so that its extremity is in near contact with the top of the pawl *e*, so as to disconnect promptly the latter from the galley. The lever *m* is retained in position (with the pawl *e* engaged with or disengaged from the galley) by a spring, *p*, Fig. 4, pressing it into notches formed for its reception.

The pawl *e* can be disconnected from the galley, so as to arrest its forward movement, by the foot of the operator pressing upon a treadle, *t*, connected by a wire, *s*, with said pawl.

To obviate any backward movement of the galley, I have provided a spring-retaining pawl, *u*, located under the table, so as to engage with the ratchet-teeth of the galley.

To operate with this machine, the type being inked, the galley is placed within the groove *b*, where it is pushed along under the shield *v* until the first name comes nearly under the opening in the shield *d*, and the pawl *e*, that had been depressed by the lever *m* during the introduction of the galley, is released by shifting the handle of the lever *m* from one of the locking-notches to the other, and said pawl, operated by the bell-crank lever *f*, rod *g*, and continuously-revolving eccentric *h*, engages periodically with all the teeth of the galley in succession, and advances it until suddenly arrested, either by the foot of the operator or by the handle of the lever *m*, or until all the impressions of addresses have been taken upon the papers, by the pressure exerted by the platen attached to the extremity of the plunger. Then the pawl *e* is locked, the galley is removed from one end of the groove *b*, and a new one, containing another set of names, is introduced at the opposite

end of the groove *b*, and the previous operation is repeated.

As both the feeding mechanism and the plunger are operated by eccentrics the machine is noiseless in its movements. It is generally operated by a belt passing over the pulley *G*; but it is evident that it can also be operated by a treadle and a crank, if desired.

I am aware that the platen of addressing-machines has been attached to vertical cylindrical rods, and that a vertical motion has been transmitted to these rods by various means, and I do not claim any device for that purpose, except the one shown in my drawings.

Having now described my invention, what I claim is—

1. In combination with the reciprocating plunger *E*, constructed and operating substantially as described, the slotted quadrangular platen-stem *i*, connected to the plunger by a clamp and thumb-nut, as and for the purpose described.
2. In combination with a spring-pawl pivoted to a bell-crank lever, operated by an eccentric, the treadle *t* and wire *s*, to temporarily arrest the advance of a galley, substantially as described.
3. In combination with a mechanism for advancing the galley of an addressing-machine by means of an eccentric bell-crank and spring-pawl, the plunger *E*, also operated by an eccentric independent of any intermediate mechanism, so as to render the machine noiseless in its operations, substantially as described.

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Witnesses:

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