(No Model.)

C. D. WHITE.

ADDRESSING MACHINE.

No. 270,714. Patented Jan. 16, 1883.

Fig: 1.

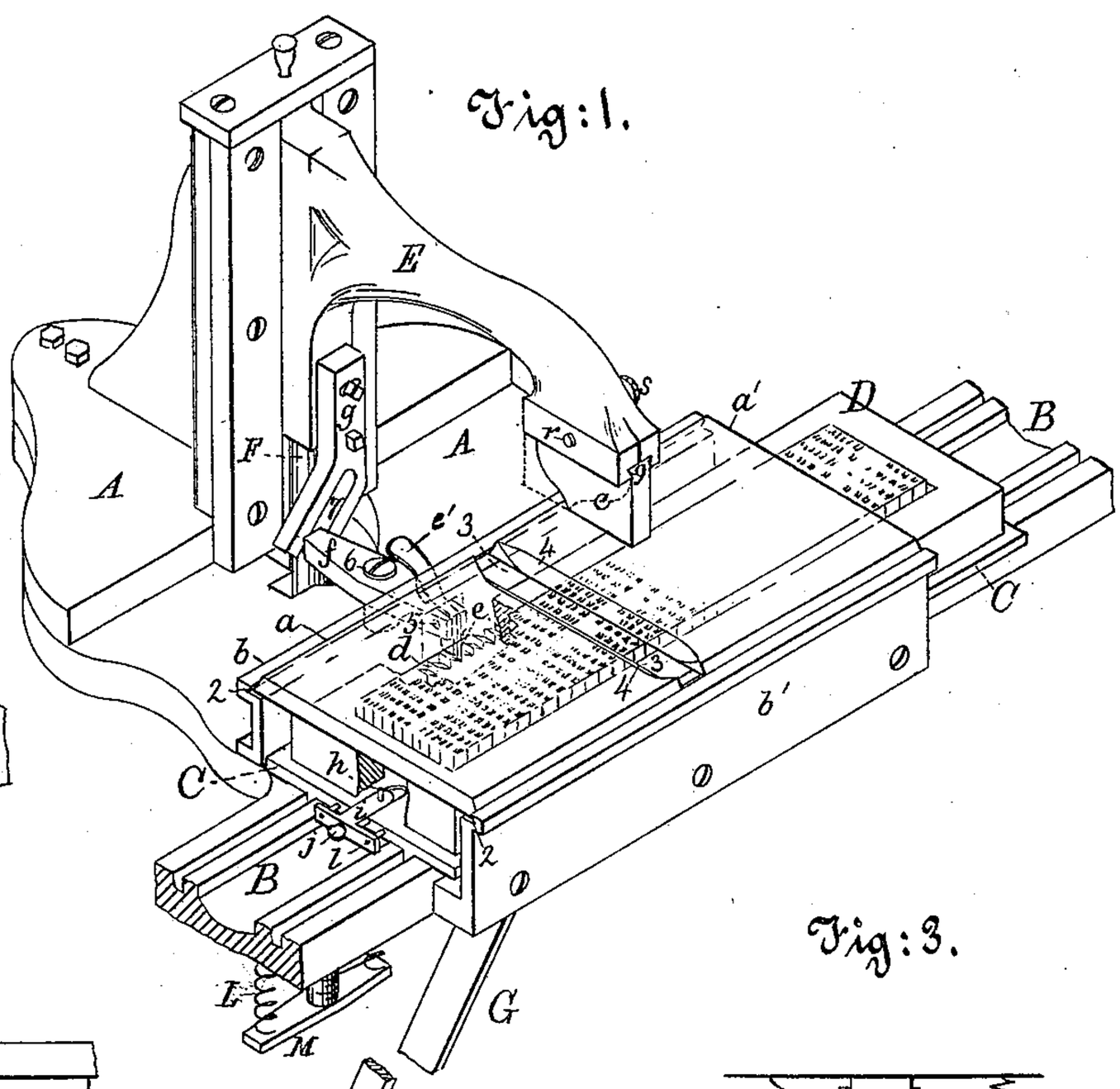


Fig: 2.

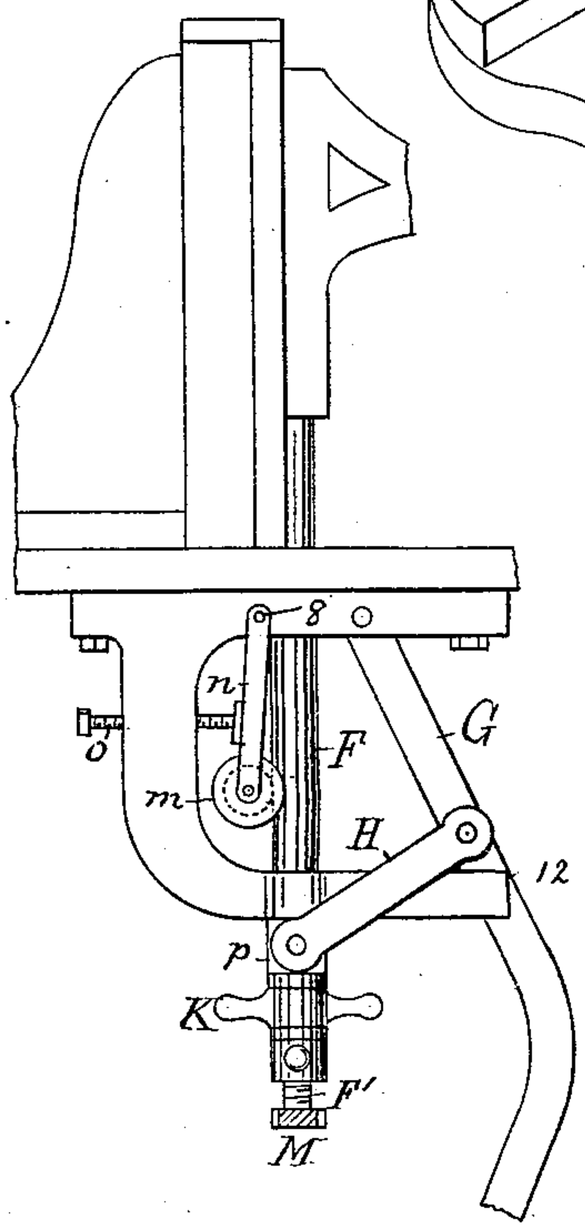


Fig: 3.

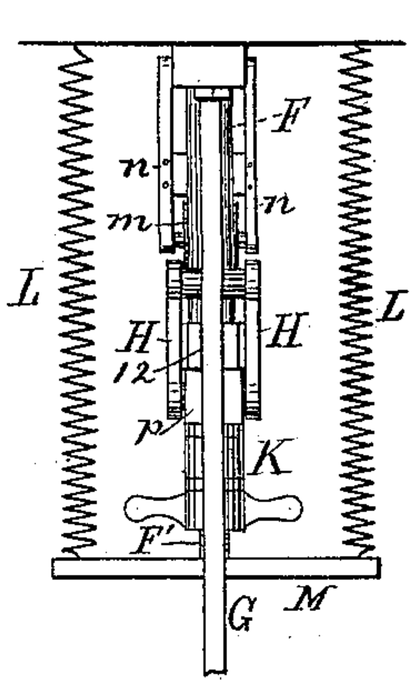


Fig: 4.

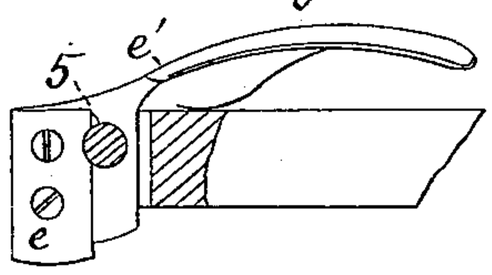
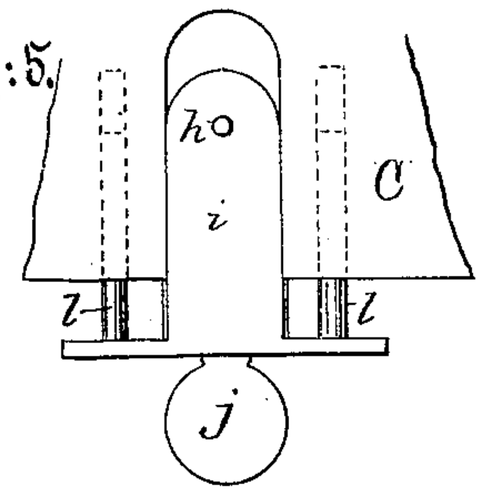


Fig: 5.



Witnesses.
Jos. P. Livermore
Bernie J. Noyes.

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UNITED STATES PATENT OFFICE.

CHARLES D. WHITE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO PERRY MASON & CO., OF SAME PLACE.

ADDRESSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 270,714, dated January 16, 1883.

Application filed February 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. WHITE, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Addressing-Machines, of which the following description, in connection with the accompanying drawings, is a specification.

My invention relates to an addressing-machine, and is embodied in a machine of that class in which the different addresses are set up in a suitable chase and mounted upon a sliding bed-plate, which is fed forward after each impression to present a new address in proper position beneath the platen. The type in the chase pass beneath a protecting or paper plate, upon which the paper to be printed is laid, the said plate being provided with a slot of sufficient size to let the paper be acted upon by the type by which it is to be impressed, and preventing it from being soiled by contact with the inky faces of the other adjoining type.

In addressing periodicals it is customary to mark the different individual papers or wrappers that are going to the same town or post-office address only with the name of the individual to whom they are to be delivered, placing all the said periodicals thus addressed in a single wrapper, which is marked with the name of the town, county, and State, or otherwise properly designated to cause it to be sent to the post-office from which the contained periodicals are to be delivered.

In setting up the type in the chase all names of individuals belonging to one post-office are placed in a series, followed by the name or address of the said post-office, after which follow another series of individual names and another post-office address, and so on. As the post-office addresses are printed upon different wrappers from the individual addresses, it is important for the operator to know when a post-office address arrives beneath the platen, so that he may cause the proper wrapper to be printed.

In the class of machines upon which the present invention is intended as an improvement, as heretofore constructed, the operator has been notified of the arrival of the post-office address by means of special quadrats placed in the chase in line with the town address, and co-operating with a bell or gong, the hammer of which is operated to give a signal when the said quadrat passes with the town address into the position beneath the platen. These quadrats are liable to be broken, and in the aggregate are of considerable expense to replace, and, moreover, when broken are the cause of having wrong wrappers printed, and thus wasting both wrappers and the time of the operator, who has to set the type-chase back and cause a new impression to be made upon the proper wrapper.

Now, in the machine forming the subject of my present invention I obviate the objections thus involved by the use of bell-strikers, as well as the expense of the bell itself, by the employment of a transparent protecting or paper plate, through which all the type in the chase can be watched by the operator as they are fed along to the position beneath the platen, so that the operator can readily determine by the eye which kind of wrapper is to be printed. The protecting-plate is preferably made in two pieces, so as to regulate the uncovered space between them, through which the paper is acted upon by the type and platen, the edges of the plate being beveled or inclined toward the faces of the type beneath; but this feature will form subject-matter for a future claim; and the invention, as hereinafter set forth and claimed, consists in certain details of construction of the machine by which its operation is rendered more perfect.

Figure 1 is a perspective view of an addressing-machine constructed in accordance with this invention, it being detached from its supporting-table; Fig. 2, a side elevation of a portion of the said machine, showing the operating parts beneath the table; Fig. 3, a front elevation of the said parts beneath the table; and Figs. 4 and 5, details on a larger scale, to be referred to.

The main frame-work A of the machine, having a track, B, for the sliding bed-plate C, carrying the type-chase D, and the press-head E, its operating-rod F, and the foot-lever G, connected by straps or links H, with the said rod F, forming a toggle-joint, are all arranged and operate substantially as in the apparatus

shown in Letters Patent No. 32,763, dated July 9, 1861, upon which the present invention is intended as an improvement.

The type in the chase D are fed, with the sliding bed-plate C, beneath the paper-plate *a a'*, which is made of transparent material, preferably thick plate-glass, and is shown as made in two portions, sliding in grooves 2 in the plate-supporting frame-pieces *b b'*, a space being left at 3 between the two portions *a a'* of the paper-plate, through which a portion of the paper is impressed by the platen *c* upon the type beneath it, when the press-head E is caused to descend by the action of the toggle-lever G H. The width of the space 3 can be regulated according to the number of lines occupied by the addresses by sliding the plates *a a'* in their holding-grooves 2. The edges of the plates *a a'* beneath the platen *c* are beveled, as shown at 4, to prevent the paper from being creased or broken when depressed against the type.

By making the paper-plate *a a'* transparent the type can be followed by the eye of the operator as the bed-plate C is fed along, so that he can see when town addresses, which are usually set in a different kind of type, arrive beneath the opening 3, and consequently knows when to use the different kinds of wrappers. The bed-plate C and the type-chase D are fed forward by the following instrumentalities: The said bed-plate C is provided with a series of inclined or ratchet-like teeth, as shown through the plate *a* in Fig. 1, a portion of the type and chase being broken out for this purpose, the said teeth being of a length or distance apart equal to the width of one or two rows of type, such as commonly constitute an address.

A feed-pawl, *e*, pivoted at 5 in one end of a lever, *f*, pivoted at 6, and having at its other end a cam-roller, which enters a slot, 7, in a feed-cam, *g*, carried by a press-head, E, is moved backward over the said teeth *d* each time the press-head is moved down to imprint a wrapper, and when the said head moves up again the said pawl *e* is moved forward, carrying the bed-plate C with it, to present a new address beneath the platen *c*. The said feed-cam is adjustably attached to the press-head, so as to cause the pawl *e* to move over and feed the bed-plate for the space of one or two of the teeth *d*, as may be desired. The acting portion of the pawl *e* is attached to a handled portion, *e'*, (see Fig. 4,) and has its lower edge curved, as shown, so as to pass easily over the teeth in its backward movement. The object of the handle *e'* is to enable the operator to raise the pawl if it should be necessary to set the chase back.

In order to place the type in proper relation to the feed-teeth *d*, the chase D is made adjustable on the bed-plate C, it being provided with a hole to fit upon a stud, *h*, on the adjusting-tongue *i*, (see Fig. 5,) fitted in a dovetail groove in the bed-plate C, and operated by a thumb-screw, *j*. The said chase-adjusting tongue *i* is provided with two guide-pins, by which its movement is made more steady and its operation much improved.

Referring to Fig. 2, it will be seen that the links H tend to produce a lateral strain on the rod F, which is obviated by the abutting friction-roller *m*, having its bearings in links *n*, pivoted at 8, so that it can be adjusted by the set-screw *o* to bring it exactly in line with the guide of the press-head E, so that the said head is prevented from binding or wearing in its guides.

In order to adjust the distance between the press-head E and pivoted connection of the links H therewith, so as to regulate the impression of the platen *c* upon the paper and type, the said links are connected with a block, *p*, free to move longitudinally upon the threaded rod F', forming a continuation of the rod F, the said block bearing upon the washers and handled nuts K, which may be adjusted longitudinally upon the threaded rod F', thus regulating the point to which the platen *c* is depressed by the movement of the lever G. The springs L, connected with the cross-bar M, attached to the lower end of the rod F F', serve to raise the press-head after an impression has been made. The lever G is guided in a slot, 12, in the frame-work. There are usually two rows of addresses set up in the chase D, one on each side of its middle longitudinal line, and the platen *c* is of such length and so located in the press-head that it acts upon one of the said rows only while the chase is being fed through once, after which the position of the said platen is reversed, as shown in dotted lines, Fig. 1, and the other row of addresses is printed. The acting face of the platen *c* is thus at one side of the middle of the end of the press-head, in which it is held, and in order to maintain the said acting face steady, so that all parts will act uniformly upon the type, it is provided at its upper side with projecting ribs, shown as dovetail-shaped, fitting corresponding grooves in the press-head E, as shown at 9, Fig. 1, the said press-head being split and clamped tightly upon the platen *c* by the clamping-screw *r*, provided with a suitable milled head, *s*. The platen *c* is thus firmly held in any position, having its acting face parallel with the type, so that a uniform impression is made.

It is obvious that the portion *a'* of the paper-plate may be of metal, as it is not usually desirable to see the type after they have passed the impression point or slot 3.

I claim—

1. In an addressing-machine, the press-head and bed-plate, provided with feeding-teeth, combined with the pawl-handle *e'*, pivoted on an axis substantially parallel with the line of movement of the bed-plate, and an independent pawl, *e*, connected therewith and having a curved edge, and the pawl-carrying lever and its operating-cam mounted on the said press-head, substantially as described.

2. The press-head and connected rod F,

combined with the operating toggle-jointed lever G H and the abutting friction-roller, whereby the said rod and the guide portion of the press-head are relieved of lateral strain, substantially as described.

3. The press-head and toggle-jointed operating-levers, combined with the abutment-roller *m*, and means, substantially as described, to adjust its position, as and for the purpose set forth.

4. The platen *c*, having longitudinal projecting ribs at its upper edges, combined with the press-head split and provided with grooves corresponding to the ribs of the platen, and means, substantially as described, to clamp it tightly upon the said platen, as and for the purpose set forth.

5. In an addressing-machine, the sliding bed-plate C and type-chase D thereon, combined with the adjusting-tongue *i*, its operating-screw *j*, and guide-pins *l*, substantially as described.

6. The combination of the press-head and toggle-levers with the abutment-roller, its pivoted supporting-links, and adjusting set-screw, substantially as described.

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

CHARLES D. WHITE.

Witnesses:
JOS. P. LIVERMORE,
BERNICE J. NOYES.