G. H. STOUT.

Addressing-Machine.

No. 167,952. Patented Sept. 21, 1875.

Fig. 1.

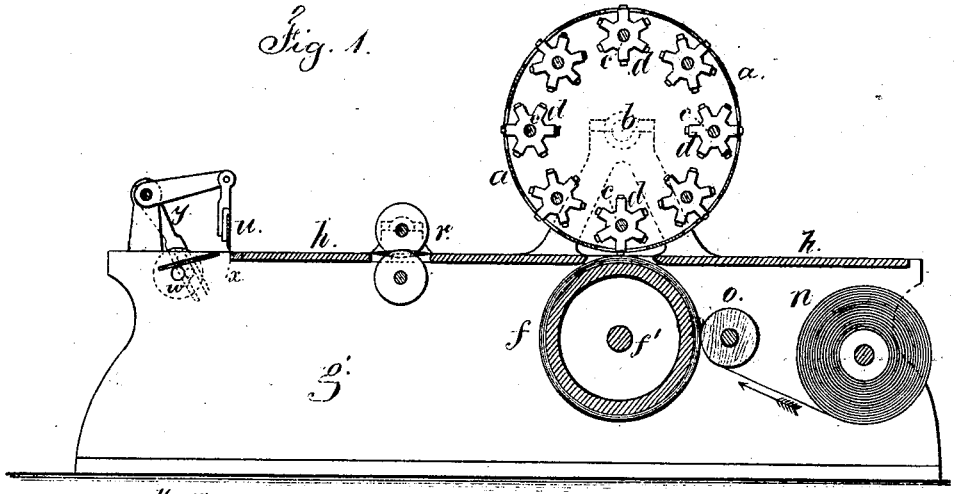


Fig. 2.

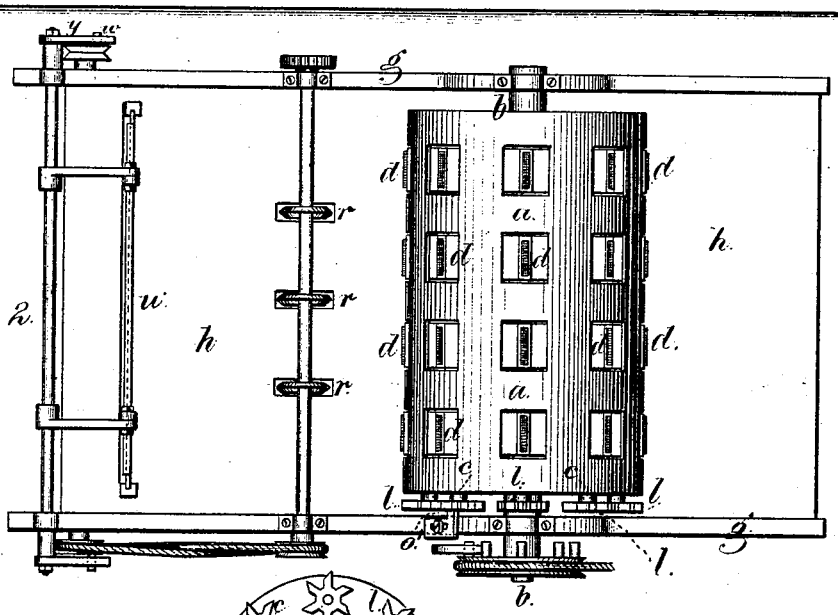
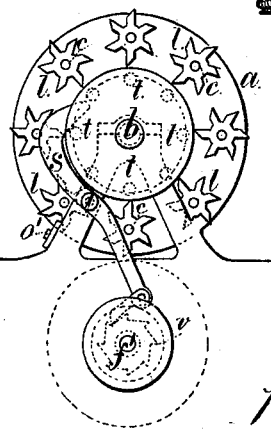


Fig. 3.



Witnesses

Chas. H. Smith

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Inventor

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UNITED STATES PATENT OFFICE.

GEORGE H. STOUT, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, JOHN I. DAVENPORT, AND GEORGE BLISS, OF SAME PLACE.

IMPROVEMENT IN ADDRESSING-MACHINES.

Specification forming part of Letters Patent No. **167,952**, dated September 21, 1875; application filed March 16, 1875.

To all whom it may concern:

Be it known that I, GEORGE H. STOUT, of the city and State of New York, have invented an Improvement in Printing-Presses, of which the following is a specification:

The object of this invention is to print wrappers for newspapers, &c., with the names and addresses of subscribers, and at the same time cut up the sheet or web into pieces of the size required for such wrappers.

I make use of a cylinder containing numerous heads revolving on secondary shafts, and each head has several addresses in type-holders, and as the main cylinder is revolved the printing takes place from the types that are in position to coincide with its periphery, and as the cylinder brings the heads successively around to a certain place a stop acts to give each head a partial rotation, to turn the types that had been printed from out of position and bring the next address into position to be printed at the next rotation of the cylinder.

In the drawing, Figure 1 is a vertical section of the press. Fig. 2 is a plan of the same, and Fig. 3 represents the device for turning the heads and feeding the paper.

The main cylinder *a* is mounted upon the shaft *b*, and revolved by suitable power. Within the main cylinder there are the secondary shafts *c*, carrying heads *d*. The number of these shafts will depend upon the size of the cylinder *a*, and the relative size of the heads *d*. I have shown eight of these shafts, and the number of heads upon each shaft will depend upon the length of the cylinder *a* and the distance required between one address and the next, as printed upon the sheet of paper. The cylinder *a* may be an open skeleton, but I have shown the same as made with openings, one opposite each head, so as to allow the types that are printed from to project and to allow the heads to be freely revolved. Each head *d* contains numerous type-holding sockets at regular distances apart. I have shown six, but the number may be more or less as desired, and into each holder the name and address, set up in types, is inserted and secured by suitable clamping devices. There is an impression-cylinder, *f*, between the frames *g* and below the bed *h*, and inking-rollers and fountain of any proper character are provided so as to ink the types that stand in line with the periphery of the cylinder, and hence the printing will be the same as from any ordinary cylinder-press; but in order to prevent duplicating the printing each revolution of the press-cylinder *a*, the shafts *c* and heads *d* are turned around progressively one space each revolution of the cylinder, so as to move the types that have been printed from out of the way and bring others into position. To accomplish this object I provide a star cam-wheel, *l*, at the end of each shaft *c*, and a stop, *o'*, upon the frame, so that as the cylinder *a* revolves, the star-wheels *l* come successively into contact with the stop, and each is revolved one space, whereby the entire types of the cylinder-heads will be printed from after said cylinder *a* has been revolved a sufficient number of times to cause a complete revolution of each shaft *c* in its bearings. A conical spring-stop and holes in the star-wheel, or other means, are to be applied to hold the respective shafts and heads in the positions to which they are turned successively, and at the same time allow of such turning movements being communicated progressively.

It will be understood that any well-known mechanical movements may be resorted to for communicating the movements specified to the cylinder and head, and that the cylinder *a* may be turned by a step-by-step movement instead of a continuous revolution.

The paper is supplied from the roll *n*, and passes in contact with the impression-cylinder *f*, preferably beneath the pressure-roller *o*, and thence passes above the bed *h*, to the revolving shears *r*, that are revolved by competent power, and act to slit the web of paper up into ribbons of the desired width, and these rotary shears are so positioned as to act between the lines of impressions from the types. The sockets in the heads *d*, for containing the address-types, may be as far apart as the length of paper required for a wrapper, in which case the heads *d* are made larger than represented; but in the drawing, an arrangement is shown for feeding the paper

along rapidly between one impression and the next, and for the paper to remain nearly stationary while being printed. The impression-cylinder is to be revolved by power at the same, or nearly the same, speed of surface as the type-cylinder, so that the impression may not be blurred, and an intermitted accelerated movement is given by the lever *s* and pins *t* acting upon a pawl and ratchet-wheel, *v*, upon the shaft *f'* of the impression-cylinder *f*, so that the said cylinder *f* will be partially revolved the required distance during the movement of the cylinder *a* between one impression and the next. It is necessary that the paper thus supplied should be drawn along upon the bed *h*, to effect which the rotary shears may be revolved with sufficient speed, or a pair of rollers employed in addition. The separation of the paper strips transversely is effected at the same time as the printing, when the paper is nearly stationary, and for this purpose the shear *u* is raised and lowered by the crank *w* and lever *y*, and acts against the bed-shear *x*, to separate the said strips between one impression and the next.

I am aware that a cylinder has been provided with a circular range of separate shafts, carrying type-holders, that are arranged in a spiral or helical line around such cylinder, and that the impressions have been made successively and the paper moved laterally to conform to the positions of the type-holders as the cylinder is turned to give the impressions. In my press there are several impressions made simultaneously on a web of paper, and that web is then divided longitudinally, and the heads containing the types are not arranged spirally.

I claim as my invention—

1. The combination, in a printing-press, of a cylinder containing separate shafts, heads, and type-holders, turned progressively, with a series of cutters that slit the web of paper longitudinally between the lines of impressions, substantially as specified.

2. The combination, with a printing-cylinder, containing separate shafts, type-holders, and heads, of an impression-cylinder and mechanism, substantially as described, for giving to the same an accelerated movement between one impression and the next, for the purposes and as set forth.

3. In a printing-press, a cylinder containing a series of printing-heads upon shafts arranged in a circle, in combination with a star-wheel at the end of each shaft, and a stationary stop that turns the shafts and heads in succession and progressively, as the cylinder revolves, substantially as set forth.

Signed by me this 12th day of March, A. D. 1875.

GEO. H. STOUT.

Witnesses:
GEO. T. PINCKNEY,
CHAS. H. SMITH.