F. DE MINICO.

STOP MOTION FOR ADDRESSING MACHINES.

APPLICATION FILED SEPT. 17, 1914.

Patented June 13, 1916.

1,186,973.

Fig. 2.

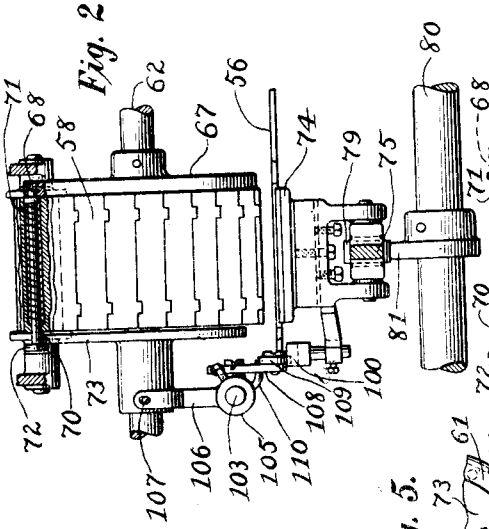


Fig. 4.

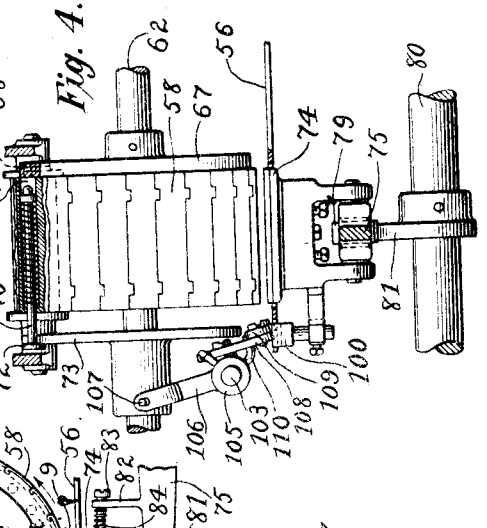


Fig. 5.

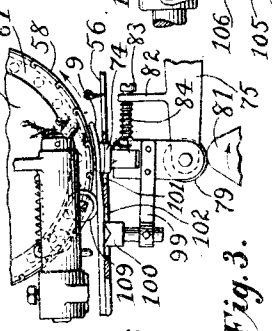


Fig. 1.

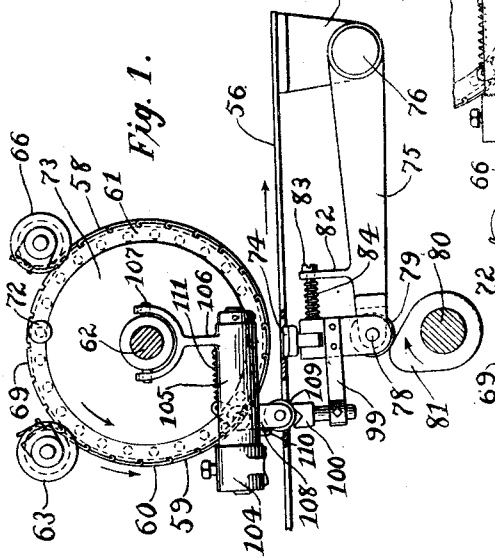


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

FRANK DE MINICO, OF NEW YORK, N. Y., ASSIGNOR TO POLLARD-ALLING MANUFACTURING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## STOP-MOTION FOR ADDRESSING-MACHINES.

1,186,973. Specification of Letters Patent. Patented June 13, 1916.

Original application filed June 20, 1913, Serial No. 774,755. Divided and this application filed September 17, 1914. Serial No. 862,186.

*To all whom it may concern:*

Be it known that I, FRANK DE MINICO, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Stop-Motions for Addressing-Machines, of which the following is a specification.

This invention relates to stop-motions for addressing machines and has for its object to provide a device of the class specified simple in construction and reliable in operation.

The present application is divided out of my copending application for Letters Patent for improvements in sheet feeding mechanisms filed June 20, 1913, Serial Number 774,755.

In the drawings accompanying this specification I have illustrated the preferred embodiment of my improvements and therein—

Figure 1 is a side elevation of so much of an addressing machine as will suffice to show the features of my invention; Fig. 2 is an end elevation corresponding to Fig. 1; Figs. 3 and 4 are side and end elevations similar to those of Figs. 1 and 2 respectively, and illustrating the operation of my improvements; Fig. 5 is a fragmentary side elevation illustrating a further feature of operation.

For printing the addresses upon the sheets, I have chosen to employ for purposes of illustration a chain of address plates 58 comprising a plurality of individual articulated plates as 59 and 60, each bearing on its outer face a suitable address, not shown, but of a character well known in this art. For advancing these plates successively to printing position, I employ a drum or carrier 61 mounted for free rotation on shaft 62, which may be supported for rotation by some suitable known means not shown. Below drum 61 is table 56 for the support of a sheet or other article to be printed and below said table, parallel with shaft 62, is shaft 80. These shafts may be connected by suitable gearing of known character for causing shaft 80 to make one rotation for each passing printing plate on drum 61.

Flanged rolls 63 and 66 may be provided for holding chain 58 in proper contact with drum 61 and for providing suitable frictional resistance to the rotation of said drum. For rotating said drum from shaft 62, I provide a pair of engaging clutch members comprising disk 67 fixed to said shaft and having a series of peripheral holes as 68 therethrough corresponding in number with the printing plate stations or seats as 69 on drum 61, the other member of said pair of clutch members comprising bolt 70 mounted for free endwise movement in a suitable chamber 71 in drum 61, and said bolt is spring-urged to engagement with one or another of said holes as 68 of disk 67. For purposes hereinafter specified, it is desirable at times to withdraw bolt 70 from engagement with one or another of the holes in disk 67, and for accomplishing said withdrawal I provide said bolt with head 72 over-hanging the circular edge of disk 73 slidably mounted on shaft 62 at that end or side of drum 61 opposite disk 67. Thus, by moving disk 73 from the position of Fig. 2 to that of Fig. 4, bolt 70 will be withdrawn from engagement with a hole 68 of disk 67, as shown in Fig. 4, whereby said shaft 62 and disk 67 are permitted to rotate while drum 61 will remain at rest under the frictional resistance of rolls 63 and 66.

Drum shaft 62 is slowly rotated from shaft 80 by means hereinbefore referred to. Printing plates as 59 and 60 may be inked prior to their advancement to printing position, by some convenient known means, not shown. For pressing the sheet against that printing plate which is in printing position, said printing position being approximately directly below shaft 62, I provide reciprocating platen 74. Said platen is arranged to reciprocate approximately vertically and is further arranged for yielding in the direction of advancement of the printing plates. To these ends I provide arm 75 pivotally mounted at 76 in bracket 77 depending from table 56, and in the free end of said arm printing platen 74 is pivotally mounted at 78, and co-axially therewith is roll 79 for co-action with cam 81 on shaft 80. Upstanding from arm 75 is post 82, through a hole in which screw 83 is free to slide, and said screw is threaded into platen 74. Spring 84 is provided about the body of screw 83 between post 82 and said platen for urging the head of said screw against post 82, and by which means printing platen 74 is normally held in fixed position relatively to arm 75 but is free to yield against the pressure of

said spring toward the right, Figs. 1 and 3, when so moved, as will appear later herein.

For operating the clutch disengaging means on shaft 62 in the absence of a sheet in printing position, I provide the following means: Outstanding to the left from printing platen 74, Figs. 1, 3 and 5, I provide arm 99, in the outer end of which is adjustably mounted lifting dog 100 for vertical reciprocation coincidently with the vertical reciprocation of said platen. In this connection, it will be noted that table 56 is conveniently provided with apertures 101 and 102 for the passage respectively of said platen 74 and lifting dog 100. Conveniently pivoted on stud 103 fixed in bracket 104, suitably supported by means not shown, is rock arm 105. Said rock arm is provided with an upstanding bifurcated portion 106 for engaging pins as 107 in the hub of disk 73. Pivotally mounted on and downwardly reaching from rock arm 105 is roll arm 108, having pivotally mounted on its lower end roll 109. Said arm 108 is normally in substantially vertical position and is held in that position against pin 110 by pull spring 111, and when said arm is in said normal position roll 109 projects downwardly through opening 102 in table 56 directly above and in position to be engaged by lifting dog 100, as that dog moves upwardly.

The operation of my improved mechanism is as follows: Sheet 9, in its advancement over table 56 to the position of Fig. 5, will engage roll 109, whereby that roll and its arm 108 will be swung upwardly to the position shown in said Fig. 5. Therefore, when lifting dog 100 rises to the position also shown in said Fig. 5, it will fail to engage said roll 109. If, however, no sheet is advanced over table 56 to engage and lift roll 109, when printing platen 74 moves upwardly for co-action with the printing plate thereabove, lifting dog 100 will engage roll 109, as shown in Figs. 1 and 2, and lift that roll to the position of Figs. 3 and 4, whereby rock arm 105 will be rotated on its stud 103, an arm 106 thereon will withdraw disk 73 from the position of Fig. 2 to that of Fig. 4, whereby bolt 70 will be withdrawn from engagement with disk 67, thus permitting that disk and shaft 62 to which it is fixed, to rotate, while drum 61 remains at rest. By means of this device, whose operation has just been described, the machine is prevented from skipping addresses in a list due to any failure of sheet supply.

I claim:

1. In an addressing machine the combination of address printing means comprising a rotatable shaft, a rotatable carrier on said shaft, printing plates on said carrier, a printing platen actuated for coaction with a printing plate on said carrier, a pair of engaging clutch members, one fixed to said carrier and the other fixed to said shaft, and means operably connected with said platen for disengaging said clutch members, the operation of said disengaging means being governed by the absence of a sheet from printing position.

2. In an addressing machine the combination of a rotatable shaft, a rotatable carrier thereon, address printing means on said carrier, a printing platen actuated toward and from said printing means, a pair of engaging clutch members, one fixed to said shaft and the other fixed to said carrier, and means operably connected with said platen for disengaging said clutch members, said clutch disengaging means being moved to an inoperative position by a sheet in printing position.

Signed at New York, in the county of New York and State of New York, this 15th day of September, 1914, before two subscribing witnesses.

FRANK DE MINICO

Witnesses:

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CHAS. W. LA RUE.