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DRAWER LOCK FOR ADDRESSING MACHINES.

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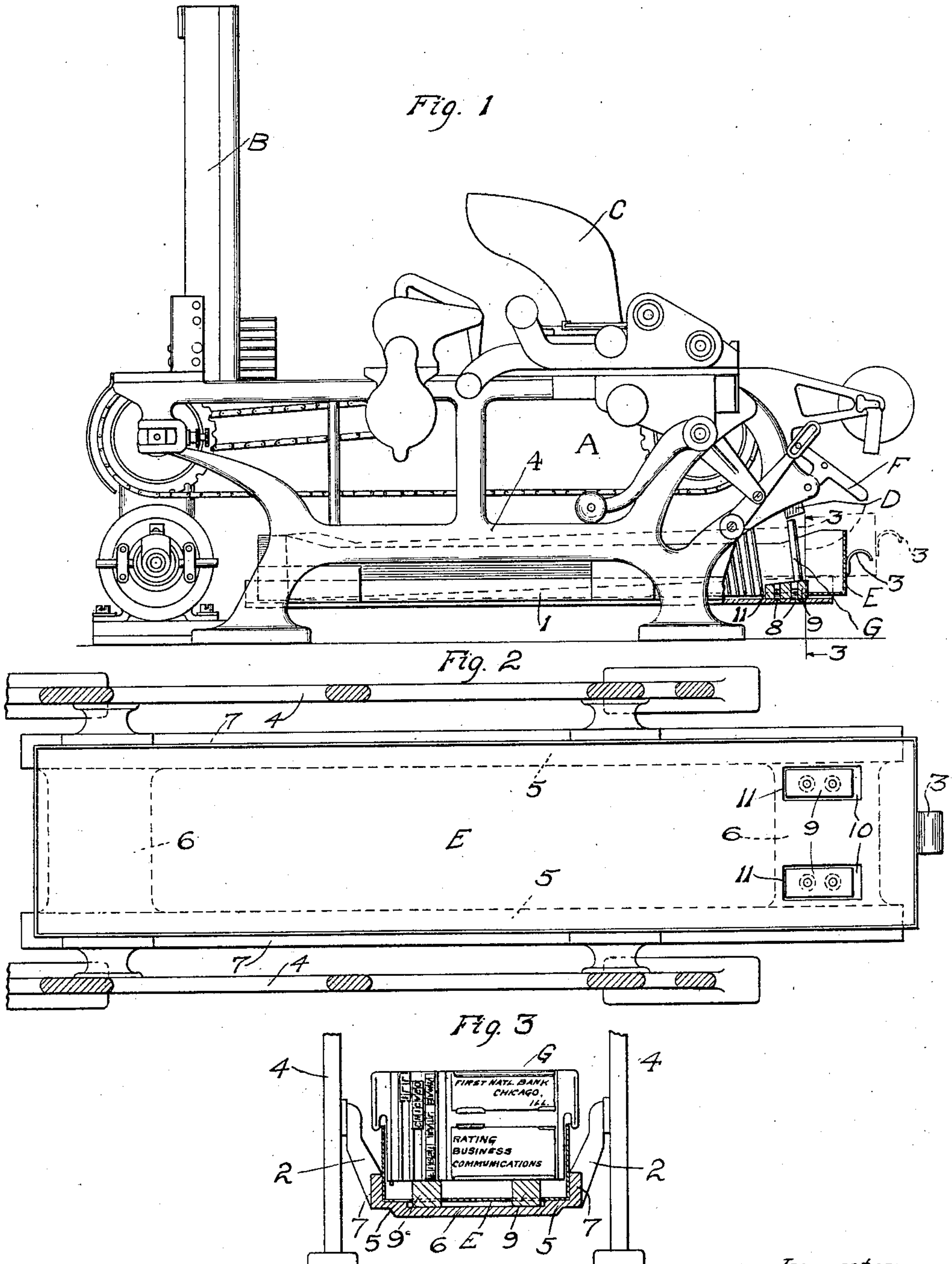
1,046,789. Patented Dec. 10, 1912.

Fig. 1

Fig. 2

Fig. 3



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DRAWER-LOCK FOR ADDRESSING-MACHINES.

1,046,789. Specification of Letters Patent. Patented Dec. 10, 1912.

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To all whom it may concern:

Be it known that I, DAVYDD C. HUGHES, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Drawer-Locks for Addressing-Machines, of which the following is a full, true, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to addressing machines and particularly to the class of addressing machines in which individual or unitary type plates are used. In addressing machines of this class the unitary or individual type plates, each plate carrying type representing an address, name and the like, are stacked up in a magazine therein, and as the machine operates it periodically withdraws these plates from the stack one at a time and passes them into printing position in the machine, the plates being discharged from said machine after they have made their impression upon sheets of paper. The plates are usually discharged or delivered in the same relation that they were taken from the stack and are delivered into a drawer or receptacle disposed in position to receive the plates. The drawer or receptacle is usually removable from the machine in order that it may be placed in a filing cabinet with its type plates arranged in the manner of a card index and they are usually made of steel or other metal which combines rigidity and durability with compactness and lightness. Since both the drawer and type plates are metal, the type plates in striking or landing on the bottom of the drawer emit a sharp, metallic sound which is rather disagreeable in an office. It also happens that the drawer becomes accidentally displaced from its proper position for receiving type plates, either by the jar of the machine or otherwise, and of course the natural operation of the entire machine is disturbed.

The object of my invention is to provide means in association with the printing machine and coöperating with the drawer for silencing or softening the impact blows of the plates as they fall into the drawer, and for preventing the plates from becoming battered or upset on their edges, thereby making it unnecessary to equip each individual drawer with an impact device.

A further object is to provide a simple lock which will retain the drawer in position against accidental displacement, but which will permit the intentional removal or replacing of the drawer.

A further object of my invention is to obtain the above mentioned advantages by the provision of simple and effective means which is extremely inexpensive.

My invention will be understood by reference to the accompanying drawings in connection with the following description:

In the drawings, Figure 1 represents a view in side elevation of an addressing or printing machine in which my invention is embodied, this view showing a type-plate drawer or receptacle in position to receive the type plates as they are discharged from the machine; Fig. 2 is a top plan view of one of these drawers and shows the manner in which the drawer is constructed to embody my invention; Fig. 3 is a transverse vertical section on line 3—3 of Fig. 1 showing a drawer in its relative position in the framework of the machine, and showing the details of a structure embodying my invention.

Referring more particularly to Fig. 1, A represents an addressing machine of the class in which unitary or individual type plates are used for printing names, addresses and the like. The type plates are usually placed in a stack one above the other in the magazine B from which they are withdrawn one by one from the bottom thereof and passed through the machine into printing position for printing an impression upon a sheet of paper or an envelop which is fed thereto from the feed magazine C. After the type plates have performed their printing operation they are discharged from an outlet or chute D in the forward part of the machine, the plates dropping downwardly in a substantially vertical position into a drawer E supported in the lower portion of the framework of the machine in position to receive the falling plates. As each plate drops into the drawer it is shoved or pushed toward the rear end thereof by the packer or pusher mechanism F.

In the machine in which I have embodied my invention, the drawer is formed up from sheet metal into a comparatively long, narrow, rectangular box or receptacle open at its top. It is held in a substantially hori-

zontal position in the lower part of the machine by a bed or support 1 hung or suspended by the arms 2 between and secured to the side members 4 of the framework of the machine. The bed 1 consists of an open frame having side and end portions 5 and 6 respectively, the side portions being provided with flanges 7 extending upwardly from the edges thereof at right angles, these flanges serving to guide the drawer into position. The arms 2 are integral with the side portions 5 and are secured to the framework 4 by bolts or otherwise. The drawer is disposed in the lower part of the machine frame with its forward end directly under the discharge outlet D of the machine. As the type plates G fall therefrom into the drawer they usually land in a slightly inclined position, and after each plate lands in the drawer it is pushed toward the rear end of the drawer by the packer or pusher mechanism F. The drawer E is arranged to slide easily on its bed 1 so as to be conveniently removed or replaced and it is guided thereon by the flanges 7 as it is moved into and out of position. The forward end of the drawer is provided with a suitable grip or handle 3 by which it may be grasped.

In the forward end of the bed or support 1 and securely held on the end portion 6 by screws 8 are two impact devices or impact blocks 9 spaced laterally at some distance apart and disposed substantially under the discharge outlet of the machine so that the plates in falling strike the surface of the blocks edge on. These impact devices are preferably made of fiber or rubber or some other suitable material which, when struck by the plates as they fall, will not batter or upset the edges of the plates. These blocks being of a comparatively soft material they will deaden or silence the impact of the plates as they strike the surface thereof, and they will also prevent the plates from bounding or being deflected out of their proper position. They are preferably made rectangular in cross section and of such dimensions that the plates will always strike some portion of their upper impact surfaces even though they should vary slightly in their downward course. These blocks project upwardly through holes or openings 10 provided therefor in the bottom of the drawer, so that their upper surfaces are raised somewhat above the bottom of the drawer and the plates are held out of contact with the bottom of the drawer until they are pushed off the blocks 9 by the pusher mechanism F. After the plates strike the blocks it is desirable that their upper edges fall in a direction toward the rear end of the drawer so that they will assume an inclined position therein and stack properly. As clearly shown in Fig. 1, I have inclined the upper faces of the blocks, the plane of incline being downwardly toward the rear end of the drawer and the angle thereof is substantially perpendicular to the plate as it strikes the surfaces. Since this is the case there will be practically no lateral movement of the lower edge of the plate while the upper edge thereof will be free to fall backwardly. This condition exists until the pusher mechanism strikes the plate and pushes it off the blocks, this action being assisted by the incline of the block surfaces. By equipping the frame or drawer bed with a device of this character there is no necessity of providing each individual drawer with a silencer and impact block, the advantages being clearly obvious. It is quite desirable that the drawer be held in position in its bed, and I have arranged the impact blocks so that they have vertical side faces and ends, and, as before stated, project some distance above the floor or bottom of the drawer through the openings 10 therein. Thus they will coöperate with the edges 11 of the openings 10 to prevent the drawer from shifting in a longitudinal direction substantially parallel to the plane of the bed or support 1 and consequently maintain the drawer against accidental displacement. However, they permit of the easy removal or replacing of the drawer as is evident from the dotted lines in Fig. 1. When it is desired to remove the drawer from the machine, the forward or handle end thereof is raised or lifted until the plane of the bottom of the drawer is slightly above the impact blocks 9. The drawer may then be pulled or drawn forward until it is clear of its bed or support. This operation is simply reversed in placing the drawer in position in its bed, that is to say, its rear end is shoved along the guides until the openings 10 are substantially above and register with the impact devices 9 when the forward end of the drawer may simply be dropped so that the impact devices enter the openings and the drawer rests firmly in its bed.

It is evident that the details may be varied considerably without departing from the spirit of my invention and I wish it to be so understood.

I claim:

1. An addressing machine having a receptacle for receiving type plates as they are discharged from the machine, a support for said receptacle, and means associated with said support and coöperating with said receptacle for receiving the impact of the type plates as they are deposited in said receptacle and for retaining said receptacle in its proper position.

2. An addressing machine having a discharge outlet from which type plates are discharged, and having a drawer for receiv-

ing the discharged type plates therefrom, a support for said drawer, and means associated with said support and coöperating with said drawer for taking up the impact of the type plates as they are deposited in said drawer and for retaining said drawer in position to receive said plates.

3. An addressing machine having a discharge outlet from which type plates are discharged and having associated therewith a drawer for receiving the discharged type plates therefrom, a support for said drawer, and means associated with said support and disposed above the bottom of said drawer for taking up the impact of the type plates as they fall from said outlet, and coöperating with said drawer for retaining said drawer in position to receive the plates.

4. In an addressing machine the combination with a drawer for receiving type plates discharged from said machine, of a support for said drawer, and means projecting upwardly from said support through the bottom of the drawer for receiving the impact of the falling type plates and for retaining said drawer in its proper relative position on its support.

5. An addressing machine having an outlet for discharging printing type plates, a drawer disposed below said outlet for receiving and containing the discharged printing plates, and means for taking the impact of the printing plates as they fall from said outlet into said drawer and for locking said drawer in position below said outlet.

6. An addressing machine having an outlet for discharging printing type plates, a drawer disposed below said outlet for receiving and containing the discharged printing plates, a support for said drawer, and an impact device associated with said support for taking up the blows of the falling printing plates, said impact device coöperating with said drawer for holding said drawer against accidental displacement.

7. An addressing machine having an outlet for discharging printing type plates, a drawer disposed below said outlet for receiving and containing the discharged printing plates and having an opening in its bottom, a support for said drawer, and an impact device mounted upon said support and projecting upwardly into said drawer through the opening therein for receiving the blows of the type plates as they fall from said outlet and for preventing the movement of said drawer.

8. An addressing machine having an outlet from which it discharges type plates, a removable drawer disposed in position below said outlet to receive and contain the discharged type plates, a guide support for holding said drawer in position below said outlet, and an impact device carried by said support and projecting upwardly therefrom through the bottom of the drawer in position to receive the impact of the falling type plates, and for retaining said drawer against movement on its support.

9. An addressing machine having an outlet from which it discharges type plates, a removable drawer disposed in position below said outlet to receive and contain the discharged type plates, a guide support for said drawer holding said drawer in position below said outlet, and an impact block carried by said support and projecting upwardly therefrom through the bottom of the drawer in position to receive the impact of the falling type plates, and for retaining said drawer against movement on its support, said impact device presenting an inclined impact surface for deflecting the type plates therefrom.

10. A printing machine having an outlet from which type plates are periodically discharged, a framework support for said machine, a drawer removably mounted in said framework and disposed below said outlet for receiving the discharged type plates, an opening in the bottom of the drawer, and a comparatively soft impact block secured to said framework and projecting upwardly into the drawer through the opening therein for silencing the noise of the falling plates and for preventing the plates from striking the bottom of the drawer.

11. A printing machine having an outlet from which type plates are periodically discharged, a framework support for said machine, a drawer removably mounted in said framework and disposed below said outlet for receiving the discharged type plates, an opening in the bottom of the drawer, a comparatively soft impact block secured to said framework and projecting upwardly into the drawer through the opening therein for silencing the noise of the falling plates and for preventing the plates from striking the bottom of the drawer, and mechanism for pushing each plate off of said device toward the rear end of the drawer after said plate strikes the impact device.

In testimony whereof, I have hereunto set my hand, this 11th day of June, 1910, in the presence of two subscribing witnesses.

DAVYDD C. HUGHES.

Witnesses:
M. SIMON,
EDGAR F. BEAUBIEN.