

No. 742,610.

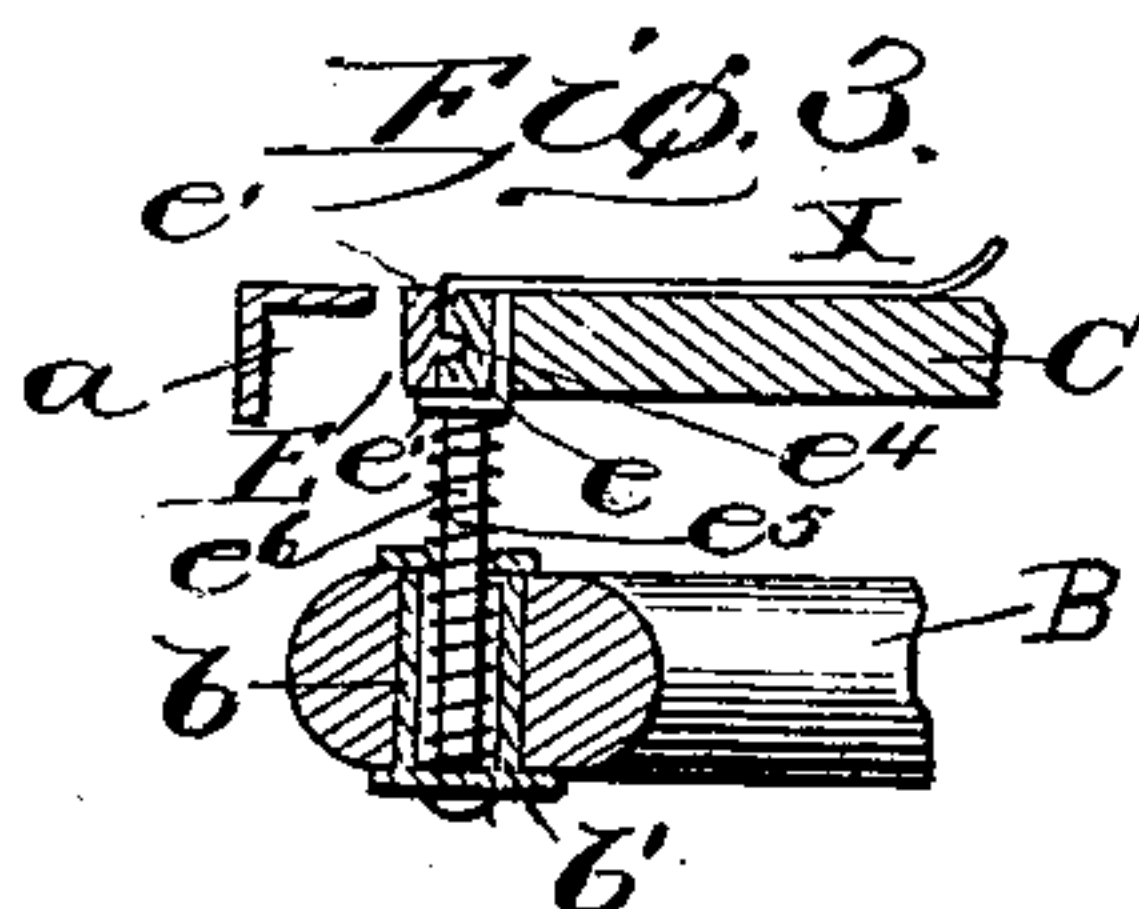
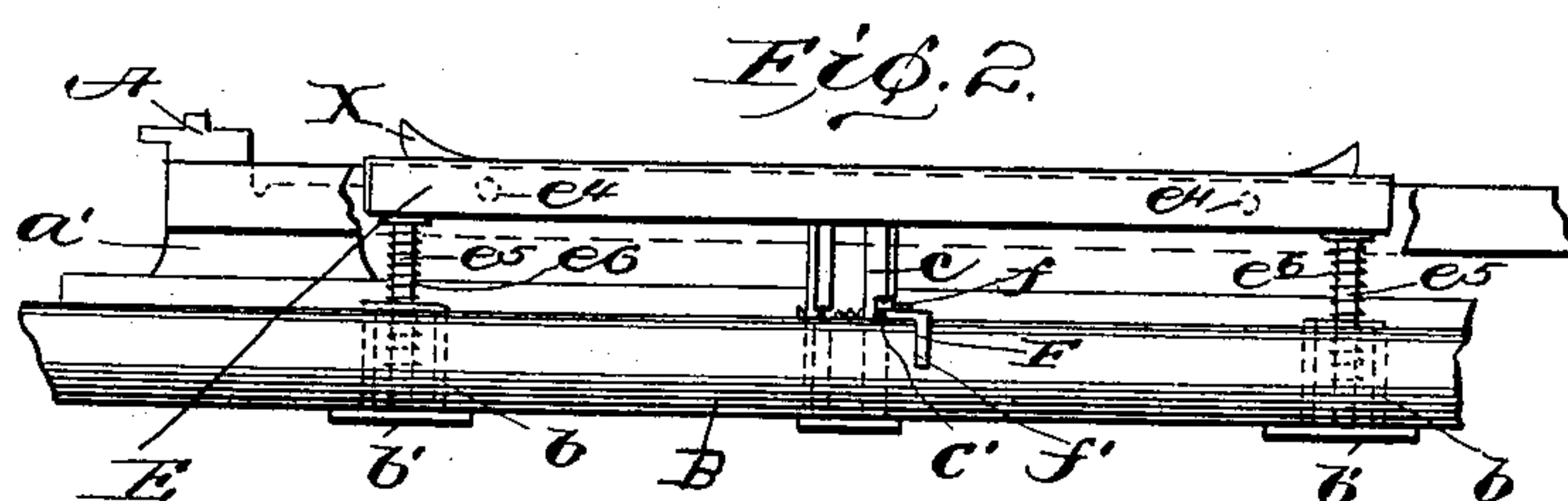
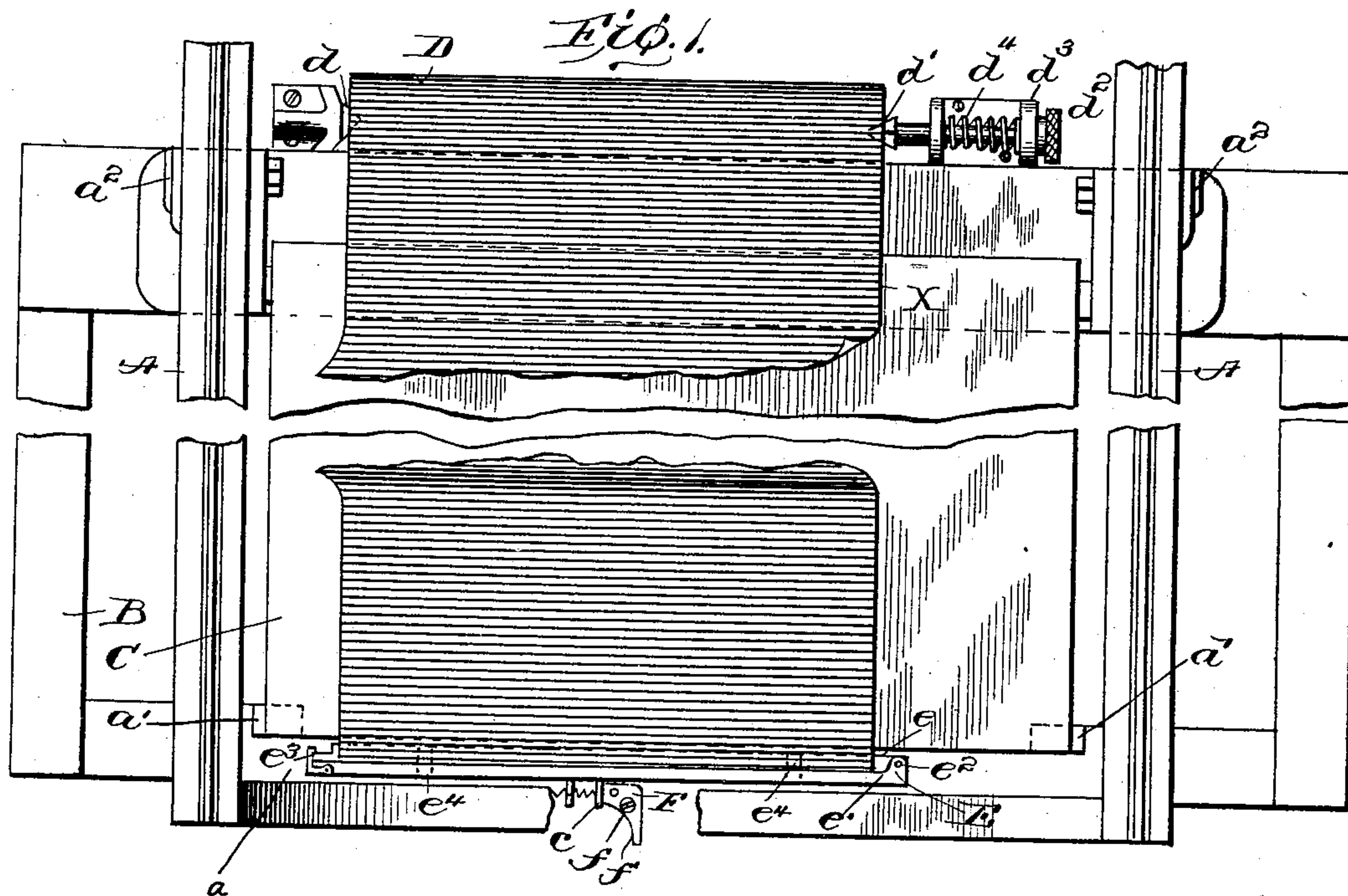
PATENTED OCT. 27, 1903.

G. W. DONNING.

CARBON SHEET OR PAPER HOLDER, LIFTER, AND SEPARATOR.

APPLICATION FILED FEB. 14, 1903.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE W. DONNING, OF EAST ORANGE, NEW JERSEY, ASSIGNOR OF  
ONE-HALF TO HARRY T. AMBROSE, OF ORANGE, NEW JERSEY.

CARBON SHEET OR PAPER HOLDER, LIFTER, AND SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 742,610, dated October 27, 1903.

Application filed February 14, 1903. Serial No. 143,419. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. DONNING, a citizen of the United States, residing at East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Carbon Sheet or Paper Holders, Lifters, and Separators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a carbon-sheet holder and lifter or separator, and particularly to devices located at the front end of the track-frame and edge of the platen for clamping and holding the carbon-sheet and for automatically raising and separating it from the work on the platen in a flat-platen type-writing machine.

The object of my invention is to provide devices which are simple in construction and which may be quickly operated for clamping and holding the front edge of the carbon-sheet and connecting devices for automatically raising and separating such sheet when desired for arranging the work.

My devices greatly facilitate the operation of inserting and removing the work or papers on which the matter is written or printed and, besides, saves the operator from the necessity of handling the carbon-sheet, and thereby soiling his fingers.

The matter constituting my invention herein will be defined in the claims.

I will now describe the details of construction and operation of my mechanism for accomplishing the results above indicated by reference to the accompanying drawings, in which—

Figure 1 represents a top plan view of the track-frame and table, showing the carbon sheet or ribbon and my holding devices for the ribbon at the front end of the track-frame. Fig. 2 represents a front elevation thereof, showing the carbon-sheet clamp in its lowered or closed position. Fig. 3 represents a sectional detail view.

The track-frame A is pivotally connected to the table B at  $a^2$  in the usual manner, so as to provide at the front end a transverse space  $a$  between the frame and table or platen.

In this transverse space  $a$  is placed my clamping device E for the front edge of the carbon-sheet. The platen C rests at its front edge upon a ledge or seat  $a'$ .

The roller D for the carbon sheet or ribbon X is supported at the rear end of the machine upon the pintles  $d$  and  $d'$ , as shown in Fig. 1. The pintle  $d'$  is spring-pressed and arranged in small bracket  $d^3$  and provided at its outer end with a knob  $d^2$ . A coiled spring  $d^4$  is placed on the rear end of the pintle in bracket  $d^3$ , so as to hold the pintle in a socket at the end of roller D and at the same time permit said pintle to be retracted for inserting or removing a roller D.

My clamping device E for the front edge of the carbon-sheet X is inserted in the transverse space  $a$  and comprises a vertically-movable member  $e$  and a clamp member  $e'$ , pivotally connected thereto, as by a pin  $e^2$ . A latch  $e^3$  is provided for locking the two members of the clamping device together, and the clamping-face of one of the members may carry short pins  $e^4$  or may be roughened or provided with a yielding surface.

From the above construction it will be seen that the members  $e$  and  $e'$  can be separated to permit convenient insertion of a manifold sheet and then latched in clamping position for securing the manifold sheet.

A supporting-plate  $c$ , carried by the member  $e$ , is provided with a notch  $c'$  for receiving a latch F, which latter is pivotally supported at  $f$  and provided with a finger-piece  $f'$ .

To the under side of the member  $e$  of the clamp and near opposite ends thereof are secured the two guide-pins  $e^5$ , Fig. 2, which extend down into sockets or housings  $b$  near the front edge of the table. These sockets are closed at the bottom by stop-plates  $b'$ . Around these guide-pins  $e^5$  are placed the coil-springs  $e^6$ , which serve for automatically raising the clamp E when the latch F is released. When it is desired to remove the work or the type-written sheet of paper, and particularly the carbon copy, the latch F is pushed out of the notch  $c'$ , and then the clamp E will be automatically raised by means of the coil-springs  $e^6$ , so as to separate the carbon-sheet from the carbon copy. It will be evident that the carbon copy can then be re-



moved and a new sheet for receiving copy readily placed in position without the necessity of handling the carbon-sheet. A new sheet of paper having been placed in position, the clamping device E will be pushed down and the catch-piece c engaged by the latch F. Only the slightest amount of manipulation by hand will be required, and the operation of adjusting the parts, including the carbon-sheet, will be greatly facilitated.

It is to be understood that the carbon holder and clamp may be raised and the work advanced, inserted, or removed without disturbing the writing mechanism and pushing it back to its rearmost position each time it is desired to adjust or raise the carbon-sheet. Likewise it would not be necessary to raise the track-rails.

It is obvious that clamping means other than the track-rails themselves may be employed to hold the work upon the platen.

I may, if desired, use this carbon holder and separator at the side of the platen rather than at the front edge thereof, as shown in the drawings.

It is evident that various constructions other than those shown and described and different arrangements may be employed and yet be within the spirit of this invention, the essential feature of which is to provide a device for positioning an edge of a sheet of manifold material either by holding it in contact with the paper or by lifting it to separate it from the paper without necessity of handling the carbon.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combination with a flat platen of a movable spring-

actuated, latch-controlled, carbon-clamping device, substantially as described.

2. In a type-writing machine, the combination with a flat platen, of a revoluble roller at one edge of the platen, a vertically-movable clamping device at the opposite edge of the platen, and means constructed automatically to raise said clamping device to separate the carbon-sheet from the work, substantially as described.

3. The combination with a table and platen, of a clamping and holding device for one edge of a carbon-sheet, means constructed to lock said device in normal operative position, and means constructed automatically to raise said device when unlocked, whereby the carbon-sheet will be separated from the work, substantially as described.

4. The combination with a table and platen, of a clamping device composed of two members pivoted together, a notched supporting-plate carried by one of said members, a latch arranged to engage said supporting-plate, and a spring device constructed automatically to raise the said clamping device upon release of said latch, substantially as described.

5. The combination with a platen and table, of a clamping device for a carbon-sheet, composed of two pivotally-connected members, a supporting-plate, and guide-pins secured to one of said members, coiled springs arranged on said guide-pins, and sockets or housings for said springs and pins, substantially as described.

In testimony whereof I affix my signature in the presence of two subscribing witnesses.

GEORGE W. DONNING.

Witnesses:

CHAS. P. BATT,  
W. L. BILLMYER.