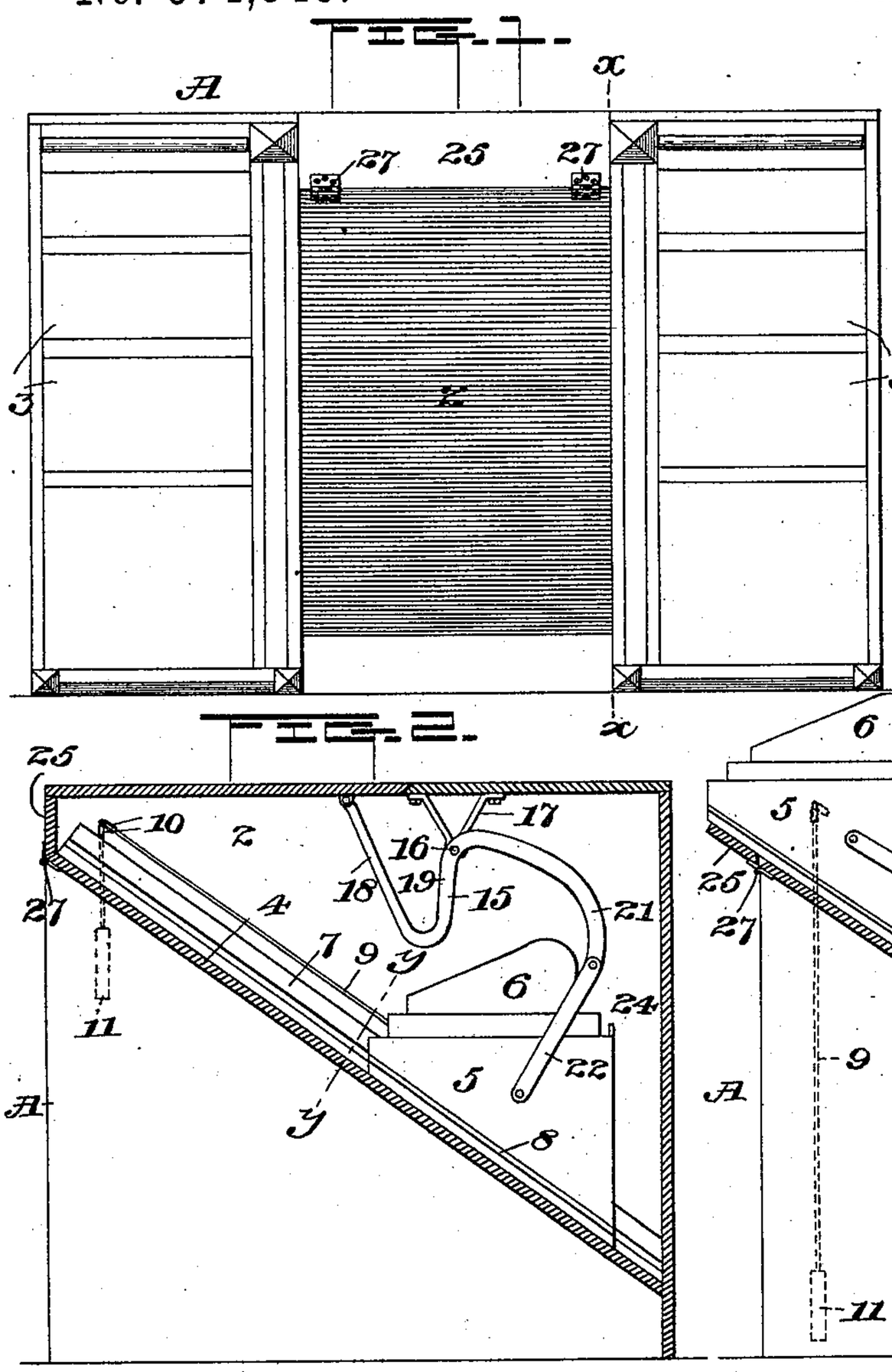
(No Model.)

G. B. KLINE.

TYPE WRITING CABINET.

No. 574,543. Patented Jan. 5, 1897.



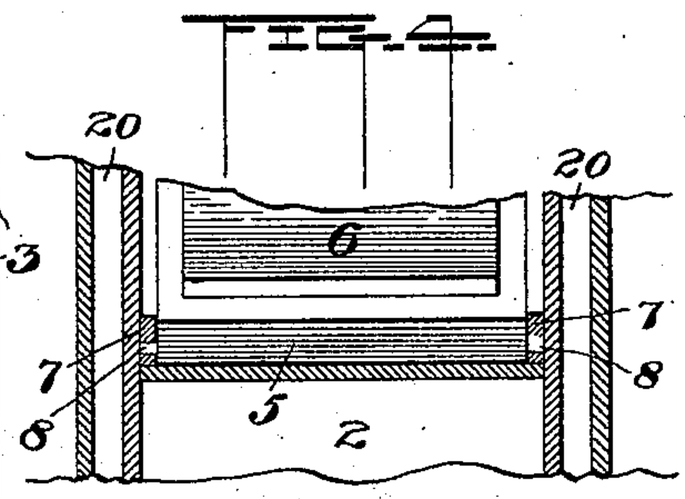


FIG. 2.

FIG. 3.

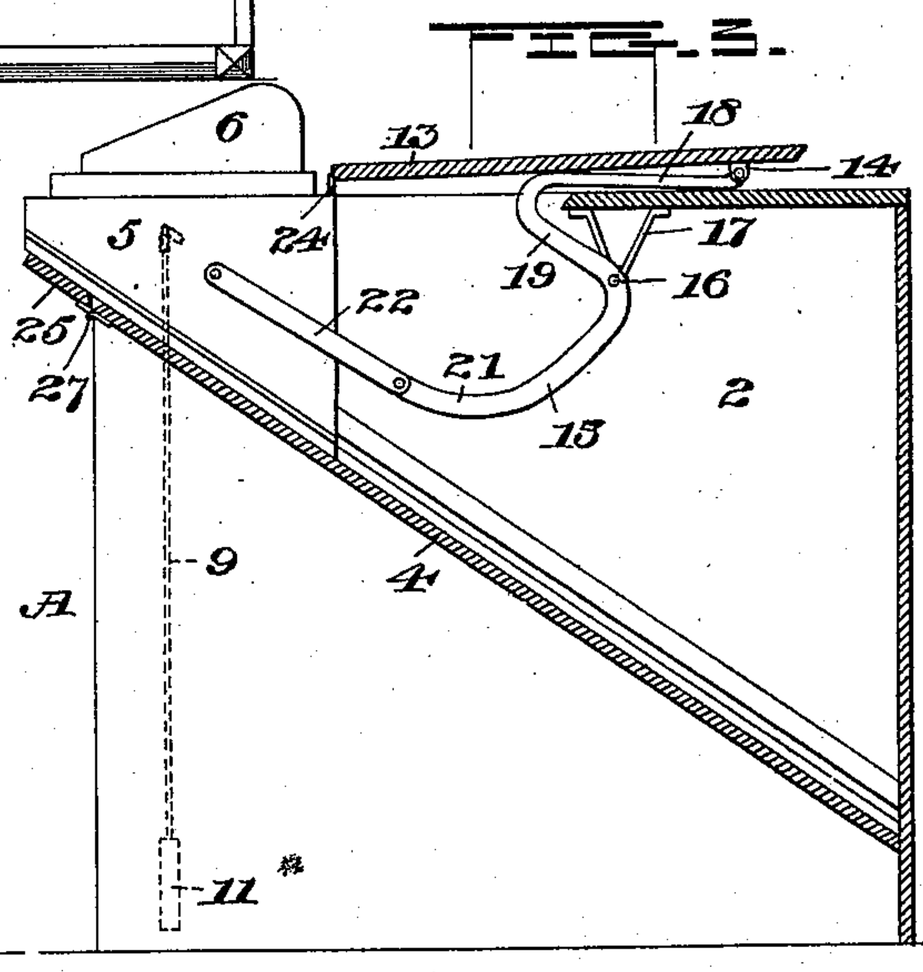


FIG. 4.

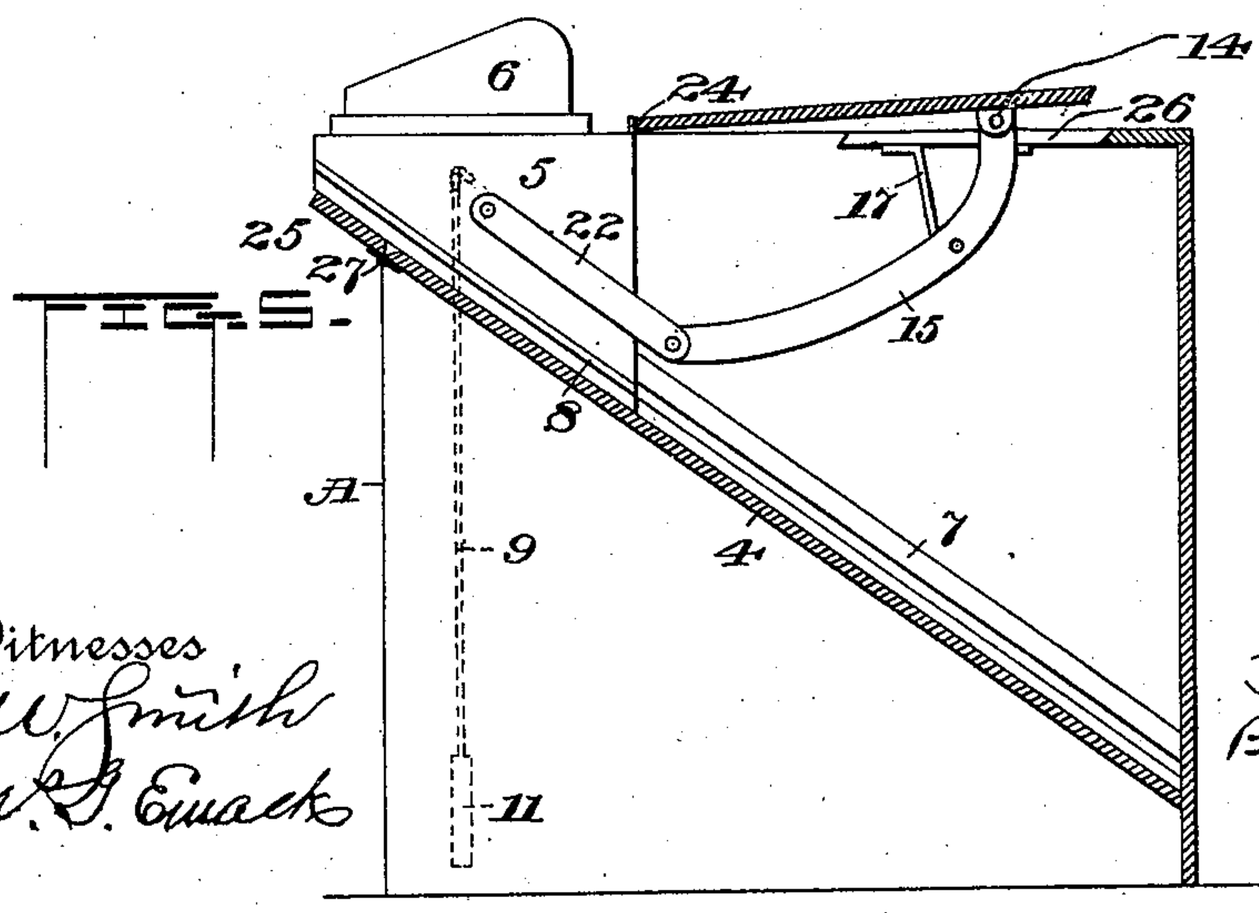
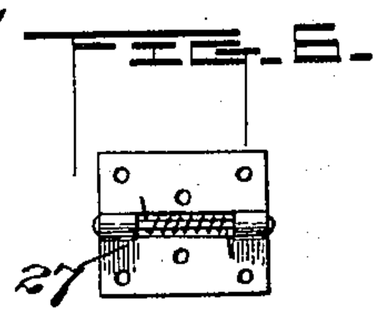


FIG. 5.



Witnesses
C. W. Smith
Chas. G. Emack

Inventor
George B. Kline
By Arthur L. Bryant
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE B. KLINE, OF WOODSTOCK, ILLINOIS, ASSIGNOR OF ONE-HALF TO V. S. LUMLEY, OF SAME PLACE.

TYPE-WRITING CABINET.

SPECIFICATION forming part of Letters Patent No. 574,543, dated January 5, 1897.

Application filed April 27, 1896. Serial No. 589,245. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. KLINE, a citizen of the United States, residing at Woodstock, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Type-Writing Cabinets, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a front elevation of a combined type-writer cabinet and desk embodying my improvements, showing the same arranged for use as a desk. Fig. 2 is a vertical sectional view on the line *x x* of Fig. 1. Fig. 3 is a similar view showing the position of parts when the type-writer carriage has been moved into position to permit use of the machine. Fig. 4 is a sectional view on the line *y y* of Fig. 2. Fig. 5 is a view similar to Fig. 3, showing a slightly-different form of operating-lever. Fig. 6 is a detail view of one of the spring-hinges.

Like numerals of reference designate corresponding parts in all of the figures, referring to which—

1 designates the body of the desk or cabinet, it being shown as having a centrally-arranged compartment 2, which opens through the front wall thereof, and with a series of drawers 3 3 on both sides thereof. Within the centrally-arranged space 2 there is secured an inclined way 4, on which is mounted a carriage 5 for a type-writer, which latter is indicated, conventionally, at 6.

The carriage 5 is guided in its movements on the inclined way by means of suitable interlocking guides. In the construction shown the side walls of the compartment 2 in the desk are provided with longitudinally-grooved guide-strips 7, which extend parallel to the base 4, and on the carriage 5 are secured laterally-projecting guide-strips 8, which fit in the last-described ways or grooves in said strips 7.

By reference to Figs. 2, 3, and 5 it will be seen that the carriage 5 is substantially triangular in longitudinal section, so that the top thereof, on which the type-writer 6 rests, is always horizontal. Therefore there is no changing of the position of the machine when it is allowed to move down into the chamber or space provided for it below the desk-top. To the opposite sides of the carriage 5 are connected the ends of cords or cables 9, which extend over suitable guide wheels or rollers 10 and have secured to their other ends counterweights 11. These weights fit loosely in guides 20, formed between the central space 2 of the desk and the series of drawers on each side thereof, and are of such weight as to counterbalance the weight of the machine and carriage 5.

The carriage 5 and the type-writer thereon can be moved upwardly and forwardly along the inclined base 4 to bring the machine into position for use (shown in Fig 3.) by the following means:

13 designates a section of the desk-top or cover, which is made removable. On its under side, near its rear edge, it is provided with depending lugs 14, to which are pivoted the outer ends of levers 15, which are fulcrumed within the chamber 16, preferably being supported by depending V-shaped brackets 17, secured to the solid portion of the desk-top in rear of the removable section thereof. In the preferred embodiment of my invention (illustrated in Figs. 1 to 4) these levers are each provided with a portion 18, which extends for some distance along the inner side of the removable section 13 of the desk-top and is then bent rearwardly, as at 19, toward the fulcrum-point. From such fulcrum the lever is bent to extend in a curve 21 forward, and the forward end thereof is connected with a link 22, which is pivoted at its other end to the carriage 5. With this construction, when the type-writer carriage is in its lower position and the desk-top is closed, as shown in Fig. 2, it will be seen that all of the parts of the mechanism are concealed and that a perfectly tight top is provided for the desk, the adjacent edges of the removable section 13 and the body of such top being cut away to provide a perfectly dust-tight joint when the section 13 is in its closed position.

To bring the machine on the carriage 5 into position for use, it is merely necessary to lift up and move rearwardly the removable section 13 of the desk-top. This movement rocks

the levers 15 about their fulcra, and the pressure exerted by their forward ends, through the links 22, causes the carriage and the machine thereon to move forward and upward along the way 4. When the top of the carriage 5 has reached the plane of the desk-top, the pivot connecting the lever 15 and link 22 at each side of the carriage will be somewhat in advance of a line connecting the fulcrum of such lever 15 and the point of attachment with the section 13 of the desk-top, and thereby the carriage and the machine thereon will be locked against rearward movement. If desired, a stop 24 may be secured to the carriage 5, which, when the parts are in the last-described position, will lie in the planes of the forward end of the section 13 of the desk-top, as shown in Fig. 3, and prevent backward movement of the carriage 5 until said section 13 is raised slightly. When the parts are in this position, the movable section of the desk-top lies at such an angle to the carriage 5 and the machine thereon that it is adapted to serve as a support or holder for copy or manuscript for the guidance of the operator of the machine.

It will be noticed that I provide means whereby, when the machine 6 is to be used, its forward end will be projected slightly beyond the front edge of the desk. To the forward, upper, end of the inclined base 4 is hinged a plate 25, which, when the carriage 5 is within the compartment or chamber 16, lies in the planes of the front wall of the desk, but as the carriage moves forward and upward its end contacts with the inner face of this plate and causes it to swing downward and outward to form an extension of said base 4. As soon as the carriage is withdrawn within the desk or cabinet the spring-hinges 27, which may be of any suitable style, cause the plate to again resume its vertical position.

In Fig. 5 I have shown a slight modification of the above-described mechanism. In this case the levers 15 extend through slots 26, formed in the desk-top, instead of being bent to extend forward around the solid portion thereof, as in the construction shown in Figs. 1 to 4. In other respects the two constructions are similar.

It will thus be seen that I have provided a very simple, strong, and easily-operated mechanism for supporting a type-writer within a desk and by which such machine can be easily and quickly brought into position for use.

It will be understand that I do not limit myself to the exact details of the embodiment of my invention herein illustrated, as I am aware that my improvements can be used in connection with various styles of desks and that there can be other modification without departing from the scope of my invention.

What I claim is—

1. In a type-writing cabinet, the combination with a casing having an aperture in its top, a carrier or support for a type-writer mounted within said casing, means for moving such carrier to move the machine thereon through the aperture in the top of the casing, and a plate adapted to cover said aperture when the type-writer support is in its lowered position and to contact with said support when the latter is elevated, substantially as and for the purpose set forth.

2. In a type-writing cabinet, the combination with a casing having an aperture formed in its top, a guideway arranged within the casing in line with said aperture, a carriage or support for a type-writer fitted to said guideway, a cover-plate adapted to close the aperture in the top when the said carriage or support is in a lowered position, and links connecting said plate with said carriage, whereby when the plate is removed from the aperture the carriage will be elevated to carry the type-writer thereon through such aperture, and said plate will act to maintain the carriage in its elevated position, substantially as set forth.

3. In a type-writer cabinet, the combination with a casing having an inclined support arranged therein, of a carriage or movable carrier mounted on said support and adapted to have a type-writer secured thereto, a plate hinged to the forward end of the inclined support and normally lying in the planes of the front of the casing, and means for moving the carriage to bring the machine thereon above the plane of the top of the casing and the forward end thereof beyond the front wall of such casing, substantially as set forth.

4. In a type-writing cabinet, the combination with a casing having a guideway formed therein and alining with an opening in the top of the casing, a carriage or movable carrier for a type-writer fitted to move longitudinally of said guideway, a cover-plate for closing the opening in the casing-top, and means connecting the movable carrier and said cover-plate whereby said parts will move simultaneously and when adjusted to bring the type-writer into position for use said top plate will lie in rear of and contact with the carriage to maintain it in its adjusted position, substantially as set forth.

5. In a combined desk and type-writer cabinet, the combination with a casing having a movable top plate, a counterbalanced carriage mounted within said casing and adapted to support a type-writer, and a toggle having one member connected to the said carriage and its other member connected to the movable top plate, said toggle being arranged to lock the carrier in its upper position, substantially as set forth.

6. In a combined desk and type-writer cabinet, the combination with a casing having a movable top plate, and a movable carrier mounted within said casing and adapted to support a type-writer, of a lever fulcrumed below the casing-top and having two oppositely-curved arms, one of which is connected

with the movable top plate, and a link connecting the other arm of such lever with the movable carrier, substantially as set forth.

7. In a type-writer cabinet, the combination with a casing having an inclined guideway arranged therein, of a carrier mounted on said guideway and adapted to support a type-writer, means for moving said carrier and its load on said way, and a spring-pressed plate hinged to the upper end of said inclined guideway and adapted to form an extension thereof under pressure exerted by the said movable carrier, substantially as set forth.

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

GEORGE B. KLINE.

Witnesses:
V. S. LUMLEY,
FRANK N. BLAKESLEE.