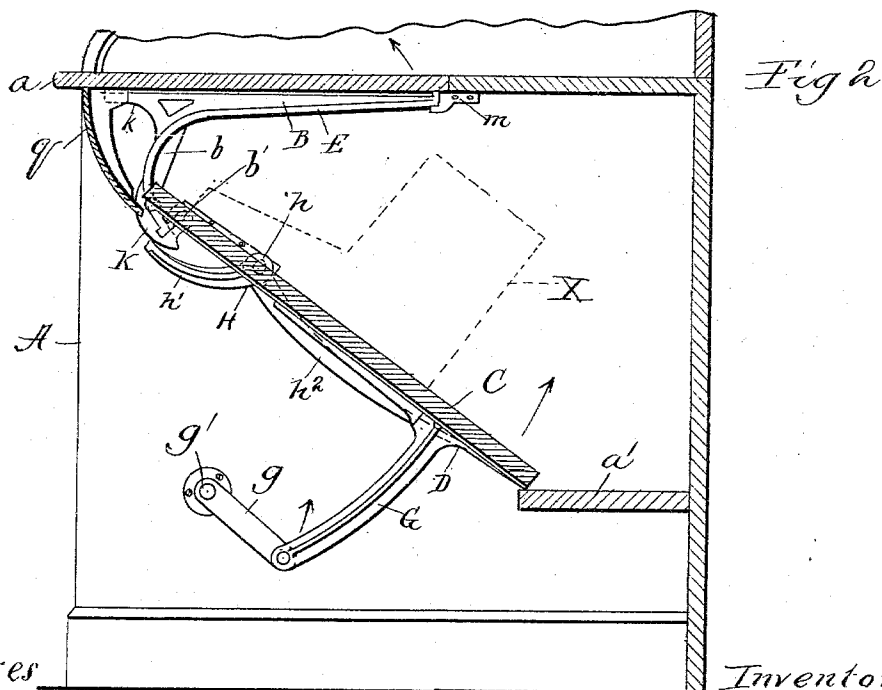
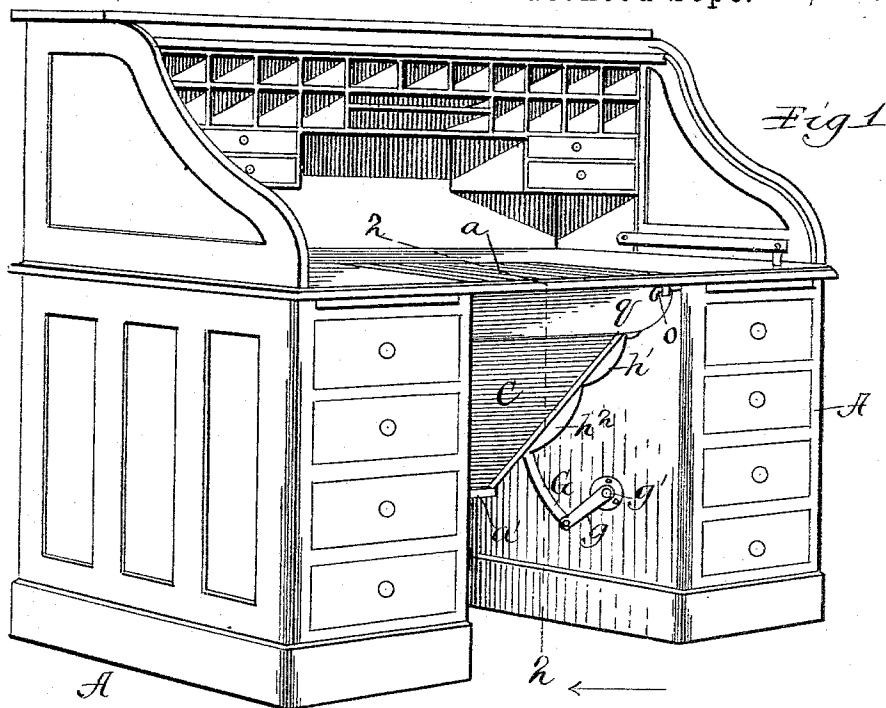


M. J. HAFGAR.
TYPE WRITER CABINET.

No. 546,322.

Patented Sept. 17, 1895.



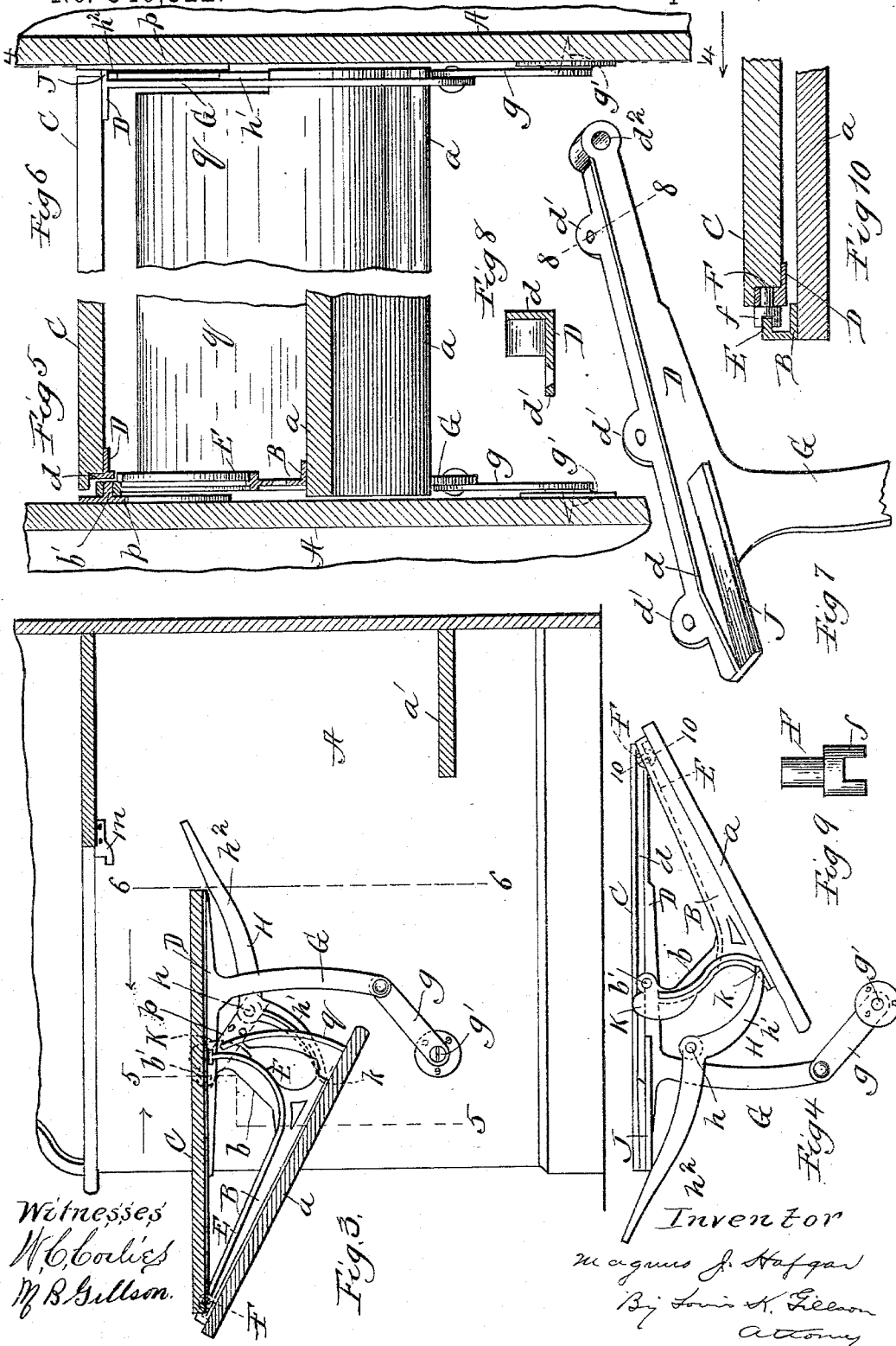
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UNITED STATES PATENT OFFICE.

MAGNUS J. HAFGAR, OF CHICAGO, ILLINOIS.

TYPE-WRITER CABINET.

SPECIFICATION forming part of Letters Patent No. 546,322, dated September 17, 1895.

Application filed June 24, 1895. Serial No. 553,859. (No model.)

To all whom it may concern:

Be it known that I, MAGNUS J. HAFGAR, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Type-Writer Cabinets; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The invention relates to that class of type-writer cabinets in which the machine is mounted upon a movable table which may be thrown backwardly and downwardly, another table taking its place and serving as a writing-table when the type-writer is not in use.

The object of the invention is to so mount the movable tables that the type-writer is brought to a convenient height for use and needs to be but slightly lowered and tilted when the writing-table is brought into position for use.

A further object is to secure ease and certainty of action and a construction which may be applied to any ordinary desk without in any way detracting from its utility as a writing-desk.

The invention consists in the peculiar manner of hanging the two tables and in the cam and lever action, whereby the writing-table serves as means not only for covering the type-writer when the latter is out of service, but for bringing it into position for use.

It consists, further, in the various details of construction, all of which are hereinafter fully described.

In the drawings, Figure 1 is a perspective view of a desk to which my improvement is applied. Fig. 2 is a vertical section on the line 2 2 of Fig. 1. Fig. 3 is a view on the same line, the position of the movable parts being changed. Fig. 4 is a side elevation of the movable tables and the operating mechanism as seen from the line 4 4 of Fig. 6. Fig. 5 is a sectional view on the line 5 5 of Fig. 3. Fig. 6 is a similar view on the line 6 6 of Fig. 3. Fig. 7 is a detail of one of the supporting-irons.

Fig. 8 is a cross-section on the line 8 8 of Fig. 7. Fig. 9 is a detail of a guide-pivot for uniting two of the supporting-irons. Fig. 10 is a cross-section on the line 10 10 of Fig. 4.

The invention may be used in connection with any style of writing desk or table. I show at A an ordinary curtain-top desk having nests of drawers in both end cabinets or standards. The central portion *a* of the table of the desk is movable and is supported by two iron brackets B, one extending across each of its ends. These brackets are exactly alike, and I have therefore shown only one of them. An arm *b* depends from the bracket B near its forward end and is pivoted to the inner wall of the standard of the desk at *b'*, so that the table *a* may be turned over forwardly from the position shown in Figs. 1 and 2 to the position shown in Figs. 3 and 4.

The type-writer X is mounted upon the table C, which is carried by the table *a*, in the manner hereinafter described. Each side of the table C is armed with a brace D, of angle-iron, secured to the table by screws set in the apertured lugs *d'*, its flange *d* being located along the side edge of the table. At the forward end of the brace D, which is at the forward edge of the table C, is formed a horizontal eye, within which is set a pivot-pin F, having a slotted head *f*. A guide-rib E is formed on the side of the bracket B, extending forwardly from its rearward end (regarding the table now in its closed position) almost parallel with the surface of the table, but bearing away from it slightly until the arm *b* is reached, when it follows this arm in a somewhat sharp curve, terminating adjacent to the pivotal point *b'*. The pin F runs on this guide-flange, its slot being adapted to it. A lever H is pivoted to the wall of the desk-standard at *h* a little below and to the rear of the pivot *b'* of the bracket B. One arm *h'* of the lever extends forwardly and bears against the front edge of the arm *b*, which is in the form of an S-cam K, its upper end *k* terminating at the forward end of the bracket B. The other arm *h''* of the lever H extends backwardly and bears upwardly against a flange J on brace D, extending from its rearward end forwardly, which flange forms a lateral extension of the table C. The weight of the rearward end of the table C is therefore sustained

by the lever H reacting against the cam K, its forward end being supported by the flange E of the bracket B.

The table C has a connection with the desk by means of the jointed arm G, pendent from and rigidly attached to the brace D, the lower section *g* of the arm being pivoted to the wall of the standard of the desk at *g'*.

The type-writer is brought into position for use by depressing the forward end of the table *a*, then grasping its rearward end as it is raised and turning the table over to the position shown in Figs. 3 and 4. The cam K depresses the end *h'* of lever H, throwing up the rearward end of the table C. The pin F slides upon the rib E, so that the front of the table is constantly supported. The straightening of the arm G, as well as the curvature of the rib E, carries the table C forwardly during the first part of the action, and the end of the arm *h'* of the lever H slides along and off from the flange J, so that its edge bears against the rearward end of this flange and has a cam action upon it to still farther advance the table C. When the movement is completed, the center of gravity of the tables and type-writer is considerably in advance of the pivot *b'*, so that a stable support is secured. The extreme end of the cam *k* is flattened to serve as a stop. The rearward end of the rib E is bent, as shown, to stop the pivot-pin F. The pin F reaches the end of the rib E and the end *h'* of the lever H reaches the flattened portion of the cam *k* when the table C is in a horizontal position, and its further forward movement is thereby prevented.

In closing the desk the action is simply reversed. A stop-clip *m* is secured to the fixed portion of the table of the desk A to engage the rearward edge of the table *a*, and any form of bolt, as *o*, may be secured to the underside of the table *a* at one of its front corners to lock it in its closed position. A shelf *a'* is thrown across between the two standards of the desk to close the space between the rearward end of the table C and the back wall of the desk when the type-writer is not in use. The shelf *a'* may be so located as to support the rearward end of the table C, if desired.

For the purpose of closing the space between the forward end of the table C and the table *a* when the desk is closed, I secure a panel *q* to the front edge of the table *a*, cutting away its edges, so that it will not interfere with the movement of the supporting mechanism. A plate *p* is shown as secured to the wall of the desk-standard and carrying the pivots *b'* *h*. This is a convenient means of locating these points as well as strong construction.

I claim as my invention—

1. In a type-writer cabinet the combination with the case or desk, of a table for carrying the type-writer, a table to serve as a writing surface when the type-writer is out of service

and being pivoted to the case so as to turn over forwardly and downwardly and connection between the two tables so that as the writing table is turned down the type-writer is brought into position for use and as the writing table is raised the type-writer is thrown within the case, substantially as described and for the purpose specified.

2. In a type-writer cabinet the combination with the case or desk, of a table, *a*, adapted to form a writing surface, brackets B secured to the side edges of the table and having pendent arms *b* near their forward ends pivoted to the case or desk, a guide way on each bracket B extending from its pivoted point to its rearward end, a table C, having its forward end in engagement with guide ways of the brackets B, levers H pivoted to the case and each having its forward end in bearing engagement with the arm of one of the brackets B and its rearward end in similar engagement with the table C, the arms of the brackets serving as cams for depressing the forward ends of the levers as the table *a* is turned upon its pivots, substantially as described and for the purpose set forth.

3. In a type writer cabinet the combination with a case or desk, of a writing table *a* having pendent arms, *b*, near its front edge, such arms being pivotally secured to the desk at their lower ends, and a table, C, located below the normal position of the table *a* and having its forward end pivotally supported, levers H, pivoted to the desk back of the pivotal points of the arms *b* and having their forward ends caught under said arms, the rearward ends of said levers supporting the rearward end of the table C, the pendent arms having a cam action to depress the levers as the table *a* is turned down, substantially as described and for the purpose specified.

4. In a type writer cabinet the combination with a case or desk, of a writing table, *a*, having pendent arms, *b*, near its front edge, such arms being pivotally secured to the desk at their lower ends, a table, C, located below the normal position of the table *a* and having its forward end pivotally supported, levers H, pivoted to the desk back of the pivotal points of the arms *b* and having their forward ends caught under said arms, the rearward ends of said levers supporting the rearward end of the table C, the pendent arms having a cam action to depress the levers as the table *a* is turned down, and link connection between the table C and the desk, substantially as described and for the purpose specified.

In testimony whereof I have affixed my signature in the presence of two witnesses.

MAGNUS J. HAFGAR.

Witnesses:

NILS ARNESON,
LOUIS K. EILLSON.