J. H. HEYWARD.

TYPE WRITER DESK AND ATTACHMENT.


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Attached diagrams with labels and descriptions of the desk and attachment components.
To all whom it may concern:

Be it known that I, JULIUS H. HEYWARD, a citizen of the United States, residing at Greenville, in the county of Greenville and State of South Carolina, have invented certain new and useful improvements in Type-Writer Desks and Attachments, of which the following is a specification.

This invention relates to certain new and useful improvements in type-writer supports or cabinets; and it consists, substantially, in such features of construction, arrangement, and combinations of parts as will hereinafter be more particularly described.

This invention has for its object the provision of means for concealing the type-writer from view when not in use, and also to completely inclose the machine against the access of dust and dirt to the operative mechanism thereof and to prevent injury thereto.

The invention also has for its object the outward adjustment of the type-writer with respect to the support or cabinet, so as to bring the machine to any desired position convenient for operating the same.

The invention has for a still further object to dispense with the cutting or marring of any part of the support or cabinet, and to provide a support of such stability as to preserve the steadiness of the machine while being operated upon.

Still further, the invention has for its object the automatic raising and lowering of the type-writer into place accordingly as the door of the closure of the support be raised or lowered.

These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of an ordinary writing-desk having my improvements embodied in connection therewith, the said view indicating the relative position of the several parts when the type-writer is elevated and supported in a position for use. Fig. 2 is a sectional elevation of Fig. 1, taken on the line $x \times x$ thereof, and representing the rising and falling table in its lowered position within the sliding box or drawer, and the operating devices for said table being shown in their corresponding relative positions—that is to say, down. Fig. 3 is a front elevation of the cabinet portion in which the devices of my improvement are located and representing the appearance of the desk when the door of the closure is closed down into place. Fig. 4 is a similar view to Fig. 1, and representing the location of the devices of my invention at the center or middle part of the desk instead of to one side thereof. Fig. 5 is a front elevation of Fig. 4, showing the construction by which increased knee-space is obtained beneath the desk. Fig. 6 is a sectional elevation of Fig. 5, taken on the line $y \times y$ thereof, and showing the parts in their closed position. Fig. 7 is a detail sectional view representing a modification. Fig. 8 is also a sectional elevation of Fig. 5, taken about centrally through and showing the parts in their open position, the said view indicating a construction in which a greater part of the writing-bed of the desk is cut away, and which may be used in some instances.

My invention is capable of a great many different embodiments, and while it is equally adapted for use in connection with any form of table, desk, or other suitable support I have by preference herein represented the same in connection with an ordinary writing-desk 1, of double cabinet form, and which is constructed with a cabinet or pedestal 2 at each side, in which the usual sliding drawers are arranged in the ordinary manner. With whatever form of desk or other support my improved devices may be employed it is usually required that some form of closure for the type-writer and the operative devices be used, and in the present instance this closure is constituted between the vertical side walls 5 of the cabinet portion of the desk. The amount of space required for the accommodation of the type-writer when the same is closed up corresponds to about as much as is ordinarily occupied by two drawers of the desk, and it being the purpose both to conceal the type-writer from view when not in use as well as to inclose the same against the access of dust I preferably employ a suitable sliding drawer or box 6, which works in and out of the closure for the type-writer, as in the manner of an ordinary desk-drawer. Thus, as indicated in Figs. 1 and 2, the numeral 6 indicates a sliding box or drawer which is of suitable length and depth, and
which is also preferably provided at the front portion 7 thereof with an ordinary draw-pull 9 to enable the same to be moved in and out on its supports on the inner sides of the vertical walls of the cabinet. The said front portion of this box or drawer inclines downwardly and inwardly, as indicated at 10, which construction, in addition to furnishing increased space for the knees of the operator, is also for another purpose, to be more fully hereinafter described. The said drawer, it is intended, shall be so held or engaged whenever withdrawn as to be rendered temporarily incapable of being shoved or pushed inwardly, either accidentally or otherwise, and for this purpose I resort to a suitable spring or catch 11, designed to engage and hold the drawer to whatever position desired. It is obvious that in lieu of the particular form of catch or engaging device herein shown and described I could employ various other devices which would answer the purpose equally as well, and therefore it will be understood that I do not limit myself thereto in any particular. The said sliding box or drawer is capable, of course, of being carried into the closure sufficiently far whenever the engaging devices therefor are released, and the said closure is provided with a hinged door 12, which when lowered into place serves to completely conceal the type-writer, as well as preventing access of dust to the interior of the space and protecting the machine from being otherwise injured. It will thus be seen that together with the side walls 5 of the cabinet, the writing-bed 13, and the said door 12 a complete surrounding of the type-writing machine is had from all sides, which, in addition, provides a means for looking up the machine whenever desired. The said hinged or swinging door 12 is provided on the inner side thereof with an inclined ledge or shelf 14, which serves the purpose of a copy-holder for the sheets whenever the type-writer is elevated and withdrawn, at which time the said door 12 will occupy a position substantially as is represented in Fig. 1.

Various devices could be employed for automatically raising and lowering the type-writer accordingly as the machine is to be used or not; but preferably I employ an arrangement of devices whereby when the door of the closure is raised the type-writer is lifted and permitted to be swung into position for use. Thus, as shown in Fig. 1, I attach or secure to the inner side of the door 12, at or close to each side thereof and slightly nearer to the hinged end of the door, a bracket 18, which brackets, when the door is closed, occupy a horizontal position within the closure, and when the said door is elevated the said brackets project forward of the desk or other support. These brackets are constructed of any suitable light metal and the ends thereof are preferably united by a strengthening rod or strip 16.

The numerals 17 designate swinging rods, which at their upper ends are loosely connected to the ends of the brackets, while the lower ends of said rods are in like manner pivoted or loosely connected to the longitudinal edges of a rising and falling table or platform 19, the point of connection between the said rods and table being slightly to the rear of the longitudinal center of said table or platform. Also pivoted to said longitudinal edges of the table or platform are the upper ends of two sets of swinging parallel levers 21, the lower ends of which are in like manner pivoted or loosely supported to the sides of 80 the sliding box or drawer within. The rising and falling table or platform 19 is, of course, intended to receive and support the type-writer, and this latter machine is only represented in outline in order that the construction and operation of my improved devices may be fully understood.

For the purposes of a full understanding of the working of my devices let it be assumed that the door 12 has been raised and the several parts brought to the positions indicated in Fig. 1, wherein it will be seen that the table or platform 19 projects at its forward end and beyond the front portion of the sliding box or drawer, which, latter, as will also be seen, being drawn out to the proper length for enabling the operator to sit close enough to operate the machine. It being desired to replace the machine within the closure, it is simply necessary to grasp the upper edge or side of the swinging door while in its elevated position, and then by pushing or forcing said door still farther upward and backward the brackets on the door tend to carry the swinging arms upward, and this action exerts upon the table or platform a horizontal movement in the direction of the closure or space of the desk until the forward edge of said table or platform has passed free of the front portion of the box or drawer, whereupon at this time the said swinging arms will be in approximate vertical positions, as will also the swinging parallel levers 21, and then by allowing the said door to close gradually the type-writer will be lowered into the box or drawer of its own weight, it being evident that the levers 21 will be carried to a position opposite to that which they occupy in Fig. 1. As soon as the table or platform is lowered into the drawer, together with the type-writer, the drawer is then closed or forced all the way in, whereupon the swinging rods 17 are carried around upon the pivots which unite them to the table until by the time the drawer has been forced in to its full limit the said swinging levers will be brought to the position indicated at Fig. 3. It will thus be seen from the devices employed that the box or drawer can be drawn out to a greater or less extent, and also that after said drawer has been so drawn out the forward edge of the table or platform is carried over the forward edge of the drawer or box, so as to furnish a stable and steady support for the type-
writer while the latter is in use. In this way varying accommodation is had for the posi-
tion occupied by the operator, and it is thought the advantages of the whole con-
struction and arrangement will be clearly ap-
parent. Whenever the door is raised or low-
ered for the purpose of raising or lowering the table or platform, the latter is made to
describe a movement both back and forth as
well as up and down, and in following these
movements the inclined front portion of the
box or drawer serves as a guide upon which
the forward edge of the said platform rides,
as it were, while executing the movements
imparted thereto in the raising and lowering of
the type-writer in the manner herein-
before set forth.

Referring to the modification shown in Figs.
4 and 6, it will be seen that my improved de-

vice is arranged at the middle part of the
desk or support instead of at one side thereof.
The rising and falling platform a in this in-
stance, as well as the devices through the
mechanism c which the said platform is raised
and lowered, are substantially the same in
construction and arrangement as those re-
ferred to in connection with the other figures of
drawings, and the construction of the slid-
ing box or drawer is also the same in all es-

tential particulars, with the exception that
suitable guides b are employed on the oppo-
site inner walls of the cabinet portions of the
desk, so as to accommodate the movements of
said box or drawer in and out. With this
construction as well as with the former one
no cutting of the writing-bed of the desk is
necessary beyond a small portion or strip d,
taken from the central portion at the front,
and this strip or section d is hinged to the
writing-bed at c in such manner as to be
capable of swinging upwardly, the hinges
thereof being set into the surfaces of the
writing-bed and strip so as not to spoil the
appearance of the door 12" in this
instance, instead of being hinged directly to
the forward edge of the writing-bed of the
desk, is hinged at d' to the said strip or sec-
tion d in such manner as to be capable of be-
ing swung or carried inwardly beneath the
writing-bed, substantially as is shown in Fig.
6, and a glance at such figure shows that when
closed the said door 12" assumes an inclined
position practically coinciding with the in-
clined front portion of the sliding box or
drawer. Thus with this particular embeddi-

ment of my invention ample room is provided
for enabling the clerk or other occupant of the
desk to sit plenty close enough thereto
while engaged in writing or other work.

Fig. 4 shows the door 12" raised and the ta-
le or platform, together with the drawer and
type-writer, occupying substantially the same
positions as shown in Fig. 1 of the drawings.
It may be added that but little or no cutting
of the desk or support is necessary for the at-
tachment or connection of my improved de-

vices; but in some instances it may be desir-
able to cut away a greater portion of the writ-
ing-bed of the desk than has already been re-
ferred to, and in such event the construc-
tion will be the same as is indicated in Fig. 8, that
part of the writing-bed which is so cut to
permit of the proper operation of the devices
being indicated at 50, while in all other re-
spects the construction and arrangement are
precisely the same.

Referring to the modification shown at Fig.
7, the sliding box or drawer 51 in this instance
is also the same, and also the rising and fall-
ing table, together with the parallel support-
ing-levers for the latter, is the same, with the
exception, however, that the rearward levers
are provided with offset portions 53, which
are designed to contact with the front of the
desk-cabinet whenever the drawer is pulled
out, and thus is the table elevated and raised
automatically by this simple action.
It will be seen that as an exceedingly sim-
ple contrivance, as well as one comprising
both lightness and durability combined with
great neatness, strength, and compactness in use,
my invention possesses many advantages as
compared with former devices or contrivances
herefore devised with similar objects in view.

As before stated, I am not confined to the
precise details of construction and arrange-
ments of the several parts, and therefore
without limiting myself in any of these partic-
ulars.

I claim as my invention—
1. A typewriter cabinet or support comprising
a closure, a swinging door therefor, a slid-
ing drawer working in said closure, a mov-
able table adapted to the drawer, and mov-
able connections between the door and table
whereby the latter is elevated and moved for-
ward simultaneously whenever the door is
raised, substantially as described.
2. A typewriter cabinet or support comprising
a closure, a swinging door therefor, a slid-
ing drawer working in said closure and hav-
ing an inclined front piece, a movable table
adapted to the drawer, and connections be-

between said door and table whereby the latter
is elevated and moved forward when the for-
mer is raised, substantially as described.
3. A typewriter cabinet or support comprising
a closure, a swinging door therefor, a slid-
ing drawer working in said closure, a table
adapted to the drawer and in movable con-
nection therewith, and the movable connec-
tions between the door and table whereby the
latter is elevated and moved forward when the
former is raised, substantially as de-
scribed.
4. A typewriter cabinet or support comprising
a closure, a swinging door therefor, a slid-
ing drawer working in said closure and having
an inclined front piece, a table adapted to the
drawer and in movable connection therewith,
and table whereby the latter is elevated and moved forward when the former is raised, substantially as described.

5. A typewriter cabinet or support comprising a closure, a swinging door therefor, a sliding drawer working in said closure, and means for engaging the drawer at different positions of adjustment, a movable table adapted to the drawer, and connections between the door and table whereby the latter is elevated and moved forward when the former is raised, substantially as described.

6. A typewriter cabinet or support comprising a closure, a swinging door therefor having brackets attached to the inner side, a sliding drawer working in said closure, a movable table adapted to the drawer, swinging arms between the brackets and table, and pivoted parallel levers working on the inner sides of the drawer and also in movable connection with said table, substantially as described.

7. A typewriter cabinet or support comprising a closure, a swinging door therefor having brackets projecting from the inner side, a sliding drawer working in said closure, a spring hook or catch for engaging the drawer, a movable table adapted to the drawer, pivoted arms swinging from the brackets and in movable connection with the table, and pivoted parallel levers working on the inner sides of the drawer and also in movable connection with said table, substantially as described.

8. In a typewriter cabinet or support, the combination of a closure, a hinged strip located at the top of said closure in front and adapted to be turned upward and back, a swinging door for said closure hinged to said strip and adapted to be carried within the closure when lowered downward, a drawer working in said closure and having an inclined front piece, a movable table adapted to the drawer, and movable connections between the door and table whereby the latter is elevated and moved forward when both said door and hinged strip are carried upward and back, substantially as shown and for the purpose described.

9. The combination with a desk, of a drawer sliding therein, a table in the drawer, and means connecting the table with the drawer whereby said table is raised and lowered automatically accordingly as the drawer is drawn out and pushed in, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JULIUS H. HEYWARD.

Witnesses:
E. EVERAD ELLIS,
W. CLARENCE DUVALL.