Feb. 14, 1928.

1,659,225

J. WALDHEIM

TYPEWRITING MACHINE

Filed May 20, 1925

2 Sheets-Sheet 1

Fig. 1.

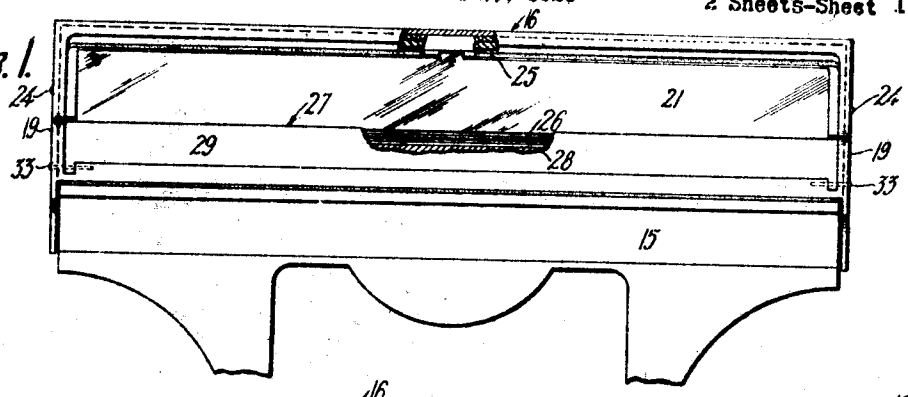


Fig. 3.

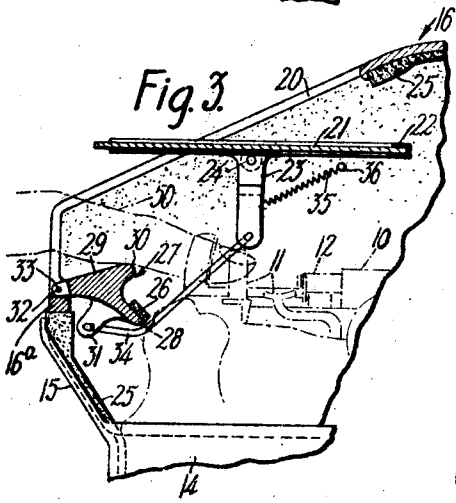
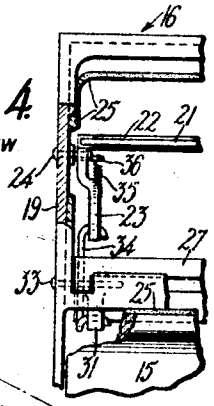


Fig. 4.

FRONT VIEW



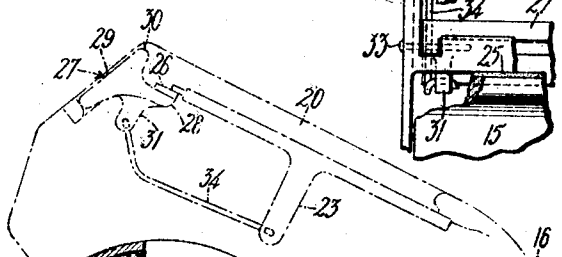
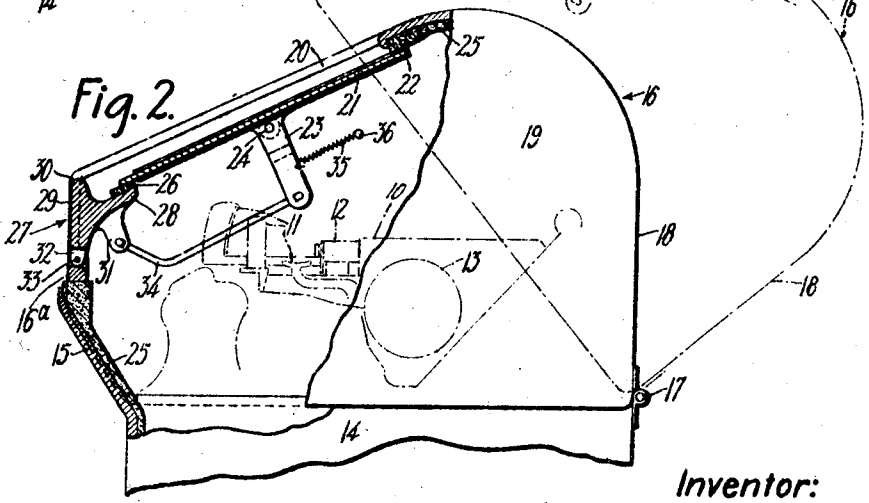


Fig. 2.



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2 Sheets-Sheet 2

Fig. 5.

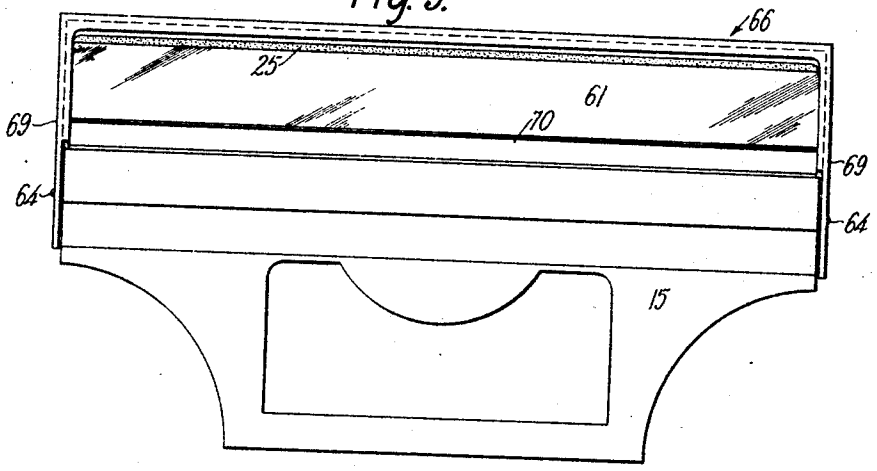


Fig. 6.

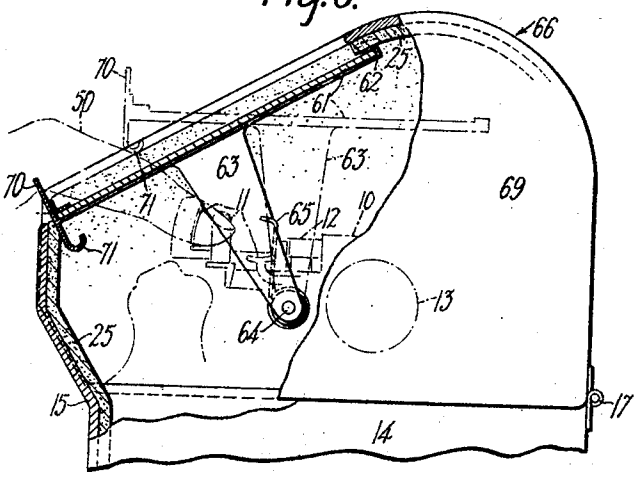
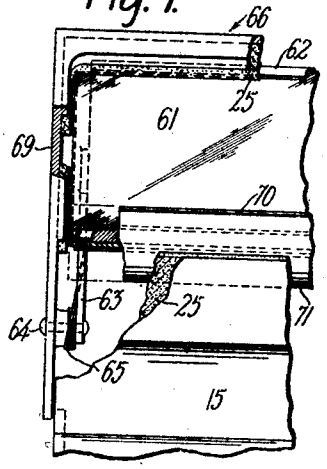


Fig. 7. FRONT VIEW



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1,659,225

UNITED STATES PATENT OFFICE.

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TYPEWRITING MACHINE.

Application filed May 20, 1925. Serial No. 31,493.

This invention relates to sound-reducing cabinets for typewriting machines.

Such cabinets usually enclose the carriage and provide for access to the carriage by having a cover hinged to the body-part of the cabinet. Manipulation of the carriage ordinarily requires the use of both hands. The frequent lifting of the cover is apt to be tiring in some instances, especially when the typewriting machine has an extra wide carriage.

Moreover, it is usually necessary to construct special carriage handles, and means for sealing them.

An object of the present invention is to enable the ordinary carriage handles to be used, and to render the frequent swinging up of the cover unnecessary. The cabinet encloses all finger-pieces of the carriage. It has a normally closed window in its cover so mounted that it can be easily pushed open with a backward movement of the hand, which can be advanced without change of direction through the window, to manipulate the carriage. Such a cabinet will be less expensive to manufacture, and durable. The cabinet comprises a body-part and a cover overlying the carriage and hinged to the back of the body-part in such a manner that when necessary it may be readily swung upwardly and rearwardly, and allow greater convenience of access to the typewriting machine platen. The window is mounted in this cover.

A push plate or strip may be pivoted in the cover and connected to open said window upwardly when the plate is pushed. This push plate extends the whole length of the cover.

In another form the present invention may take, the window may be provided with a flanged finger-piece along its lower edge with which the operative's hand may engage at any point to swing it open.

The body-part and cover of the cabinet may remain substantially the same in all cases. The front of the cover may rest on a cushion formed of a sound-deadening interior lining and be downwardly inclined toward the front.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a fragmentary front elevational view of a sound-proof cabinet for a typewriting machine of the present invention having the cover equipped with a pivotally-mounted glass window arranged to be swung upwardly to open position by pressure upon an adjacent pivoted plate.

Figure 2 is a partial side view of Figure 1 shown partly in section and partly in elevation. The dash-and-dot outline of the cover shows it in partly open position.

Figure 3 is a fragmentary sectional view of the cabinet shown in Figure 2, showing the pivoted window swung to open position, and also illustrating how the fingers of an operative can have access through the window to the finger-pieces of the carriage.

Figure 4 is a fragmentary front view of the parts of the cabinet shown in Figure 3.

Figure 5 is a front elevational view of the sound-proof cabinet for a typewriting machine having the cover equipped with a pivotally-mounted glass window arranged to be swung upwardly to open position by pressure on a flanged finger strip along its lower edge.

Figure 6 is a partial side view of Figure 5, shown partly in section and partly in elevation, the dash-and-dot outline of the window showing it in open position. The dash-and-dot outline of a typewriting machine and a finger illustrates how an operative can have access through the window after opening the same to the finger-pieces of the machine.

Figure 7 is a fragmentary view of the parts of the cabinet shown in Figure 6.

An Underwood typewriting machine 10, provided with finger-pieces 11 and a platen 13 mounted on a carriage 12, is enclosed in a sound-proof cabinet which has a lower body-part composed of a box-like member 14 and a front closure 15. The lower body-part may be of a suitable shape which will enclose the lower part of the typewriting machine 10 and allow full lateral movement of the carriage 12. Said body-part may be attached to the feet of the machine 10 in the usual manner. The cover, hood or canopy 16 may fit over and be pivoted to the member 14 of the body at its upper rear edge by hinges 17. It can be readily seen that a specially designed cover can be hinged lower down on a body-part arranged for it. The back portion 18 and the ends 19 of the cover

16 may be vertical, and the top of the cover may be downwardly inclined toward the front and may include a curved portion adjacent the back 18 and an opening 20 extending lengthwise of the cover, and arranged to be closed by a glass window 21 and a pivoted plate-part 27. The glass plate or window 21 is mounted in the metal rim 22 held by two metal lever arm parts 23 at the ends of the plate, which arms are pivoted on short pins 24 securely fastened in the end walls 19 of the cover 16.

The member 14 and the front closure 15 of the body, and all portions of the cover 16 integral with the back 18 may have an interior lining 25 of a sound-deadening material like felt. The lower edge of the inclined glass window 21, when in closed position, may rest on a soft, felt cushion 26 cemented to a flange-member 28 of the narrow substantially T-shaped push plate or finger-bar 27 extending lengthwise of the cover 16. The plate 27 has a short, downwardly-inclined, transverse arm 31 adjacent each end projecting from the lower side of the flange-member 28. The member 29 of the T-shaped plate 27 is pivotally mounted in normal vertical position in the front portion of the cover 16 on two pins 33 in two short downwardly-projecting ears 32, one at each end of the T plate 27. Recesses may be provided in the cover 16 for the ears 32, so that the member 29 may make a close joint with the cover-portion 16^a under it, so as to retard sounds of the typewriting machine.

The transverse arms 31 at each end of the flange-member 28 of the T plate 27 have holes through them for attaching looped ends of L-shaped link-members 34, which have their other ends bent to pass through and be secured to downward extensions of the pivoted lever-arms 23 which support the glass window 21. Two small tension springs 35 fastened to the lower ends of the arms 23 and to studs 36 secured in the end walls 19 of the cover 16 hold the window 21 normally closed. It can be readily seen that the T plate-members 29, 28 and 31, the links 34, the arms 23 and the window 21 form lever-systems arranged so that a light push from the front against the member 29 will cause the latter to swing inwardly and downwardly, and the front portion of the glass top 21 to swing upwardly.

As illustrated in Figure 3, the window 21 may be swung upwardly to substantially horizontal position when the end portion 30 of the pivoted T plate 27 has swung low enough to let an operative's fingers 50 pass over the end 30 and conveniently reach the finger-pieces 11 of the typewriting machine 10, while moving in substantially the same direction as when they began to push against the vertical front of the member 29 of the plate 27.

As the fingers 50 of the operative move the carriage 12 to the right, portions of the fingers may be slid along in contact with the smooth rounded portion 30 of the push-plate 27, which will prevent the springs 35 from closing the window 21 and the push-plate 27. To this end, the front surface of the part 29 and its rounded portion 30 are finished smooth, so that the operative's fingers may slide over them readily with as little friction as possible. It can be readily seen that the glass window 21 and the push-plate 27 each close part of the opening in the cover 16 through which the operative's fingers pass to have access to the finger-pieces 11 of the typewriting machine 10. It can be further seen that the above-described co-active opening action of the window 21 and the push-plate 27 provides a convenient and sufficient opening for access to the finger-pieces 11 by a simple pushing action of the fingers, and requires less movement of the glass window 21 than if it alone were swung to provide the opening.

When the operative has moved the carriage 12 to the right, as far as the carriage stops (not shown) on the machine 10 will permit, the fingers 50 may be withdrawn from the cover 16. The pressure of the fingers being removed from the rounded portion 30, action of the springs 35 causes the window 21 and the T plate 27 to swing into their normal closed positions.

In Figures 5, 6 and 7 is shown a sound-proof cabinet for typewriting machines embodying another form the present invention may take, comprising a cover 66 provided with a pivotally-mounted glass window 61, which has a flanged finger-strip 70 extending lengthwise of the window along its lower edge. The window 61 is mounted in a metal rim 62 which is held on the arms 63 pivotally mounted on pins 64 securely held in end walls 69 of the cover 66.

It will be noted that the pins 64 are mounted much lower in the cover 66 than corresponding pins 24 shown in Figure 2. This arrangement allows the operative's fingers pushing on the finger-strip 70 at any point in substantially the direction of the finger-pieces 11, to swing the glass window 61 upwardly to open position. The fingers 50 of the operative moving the carriage 12 to the right can be conveniently held against the lower looped end 71 of the finger-strip 70 to prevent coil-springs 65 from closing the window while the carriage is moved to the right. When the carriage 12 is moved to its furthermost operative position on the right of the machine 10, the fingers 50 may be withdrawn permitting the springs 65 to close the window 61.

In Figure 2, the dot-and-dash line of the cover 16 illustrates how the cover can be swung upwardly around its hinges 17, to

give the operative access to the platen 13 of the machine 10 for inserting work-sheets for other purposes. After the paper has been inserted in the machine, the cover 16 can be lowered to its operative position, and the carriage of the typewriting machine will be completely enclosed again.

It will be noted that the cabinet includes a hood or cover that entirely encases the machine; that an opening in the cover gives access to the carriage-controlling elements; that the opening in the cover is normally closed by a two-part closure, one part thereof including a pivoted window and the other part including a finger-bar; that the finger-bar is operatively connected to open the window by the pressure of the finger against the bar prior to the insertion of the finger to the carriage-controlling elements; that the window is pivotally mounted within the casing to hang in equipoise and become self-balancing, requiring a very light pressure from the finger against the finger-bar to swing the comparatively heavy window between open and closed positions, and requiring only a light spring to make the window self-closing; and that the present method of entirely enclosing the machine within the cabinet eliminates the projection of the carriage-controlling levers at the front of the cabinet, and the associated flexible slot-closing elements that retard the to-and-fro movement of the carriage during the passage of said levers between them.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. The combination with a typewriting machine having a carriage and carriage-controlling finger-pieces mounted thereon, of a sound-proof cabinet, said cabinet having a body-part to receive said machine and a cover to entirely enclose said carriage and finger-pieces, said cover including a transparent window extending lengthwise of said cover and pivotally mounted in the ends thereof to hang in equipoise, said window, when closed, inclining downward toward the front of said cabinet to expose the enclosed carriage and arranged to be swung to a horizontal open position, to give access to the finger-pieces of said carriage.

2. In a sound-proof cabinet for a typewriting machine, a cover therefor including a self-balancing and self-closing window pivotally mounted within the cover, and an independently-mounted finger-bar operatively connected to open the window to a horizontal position.

3. In a sound-proof cabinet for a typewriting machine, having a carriage and carriage-controlling mechanism, a cover including a normally-closed window extending lengthwise of said cover and pivotally mounted in the ends thereof to hang in equipoise, said window having separate and distinct connections operable by the pressure of an operative's finger moving in the direction of the carriage-controlling mechanism to open the window.

4. The combination with a typewriting machine having a carriage and carriage-controlling finger-pieces mounted thereon, of a sound-proof cabinet, said cabinet including a body-part to receive said machine and a cover to enclose the machine and the finger-pieces, said cover including a normally-closed window pivotally mounted therein to counterbalance itself and respond to a light finger pressure, and means pivotally mounted within the front of said cover and operatively connected to open said window.

5. The combination with a typewriting machine having a carriage and carriage-controlling finger-pieces mounted thereon, of a sound-proof cabinet, said cabinet including a body-part to receive said machine and a cover to entirely enclose said carriage and finger-pieces, said cover including a normally-closed window pivotally mounted therein to hang in equipoise and respond to a light finger pressure, and a finger-bar pivotally mounted in the front of said cover and connectible to open said window when pushed inwardly by the fingers of an operative moving in a direction towards said finger-pieces.

6. The combination with a typewriting machine having a carriage and finger-pieces mounted thereon, of a sound-proof cabinet, said cabinet having a lower body-part to receive said machine and an upper part comprising a hinged cover, said parts arranged to entirely enclose said finger-pieces, said cover provided with a transparent window pivotaly mounted therein arranged to be swung open, so as to give access to the carriage of said machine for manipulation purposes, and a vertically-positioned plate extending lengthwise of said cover pivotally mounted in the front thereof having a flange-member engaging under the lower edge of said cover, said plate arranged to be pushed inwardly by the fingers of an operative moving in the direction of said finger-pieces to cause said window to be swung open.

7. In a sound-proof cabinet for a typewriting machine, a cover therefor including a window pivotally mounted within the cover to become self-balancing, and a finger-bar pivoted within the cover and operatively connected to open the window to give access to the machine.

8. In a sound-proof cabinet for typewriting machines, a cover therefor including a normally-closed, transparent window pivotally mounted within said cover, and means pivotally mounted in front of and below

said cover and connected to said window whereby the window may be swung open or shut in unison with said pivoted means.

9. In a sound-proof cabinet for typewriting machines, a hinged cover, a normally-closed, transparent window mounted on two lever-arms pivoted in said cover, and a plate pivotally mounted in front of said cover having two projecting arms connected by links to said lever-arms, said window arranged to be swung open when said plate is swung inwardly.

10. In a sound-proof cabinet for typewriting machines, a hinged cover, a normally-closed, inclined, transparent window mounted on two lever-arms pivoted in the ends of said cover, and a plate pivotally mounted in front of said cover having a flange-member arranged to engage under the lower edge of said window, said cover having two projecting arms connected by links to said lever-arms, said window arranged to be swung into open position upwardly when said plate is swung inwardly and downwardly.

11. In a sound-proof cabinet for a typewriting machine, a cover therefor having an opening to give access to the machine, and a two-part closure for the opening, one part being operable to open and close the other part and to move in substantially the same direction therewith.

12. In the cover of a sound-proof cabinet for a typewriting machine, in combination, a pivotally-mounted glass window with a pivotally-mounted plate adjacent said window, the front edge of said window arranged to rest in closed position on an upwardly-inclined, cushioned flange-member of said plate, said pivoted window and said pivoted plate arranged to form elements of a lever-system whereby the front portion of said window is swung upwardly when said plate is swung inwardly.

13. In the cover of a sound-proof cabinet for a typewriting machine, in combination, a pivotally-mounted glass window with a pivotally-mounted plate adjacent said window, the front edge of said window arranged to rest in closed position on an upwardly-inclined, cushioned flange-member of said plate, the latter being pivoted on two downwardly-projecting ears, one at each end of the plate, journaled on pins held in the front portion of said cover, said plate and said window having connecting means whereby the front edge of said window is swung upwardly and said window-supporting flange-member is swung downwardly when the pivoted plate swings inwardly from pressure of an operative's fingers on its front side.

14. A sound-proof cabinet for a typewriting machine, having a lower body-part and a cover hinged to the back of said body-part, said cover having a section of its front portion cut away and the opening resulting therefrom arranged to be normally closed in part by a pivotally-mounted transparent window and the remainder by a pivoted plate-member adjoining said window at the front.

15. A sound-proof cabinet for a typewriting machine, having a lower body-part and a cover hinged to the back of said body-part, said cover having a section of its front portion cut away and the opening resulting therefrom arranged to be normally closed in part by a transparent window extending lengthwise of said cover pivotally mounted in the end thereof, the remainder of said cover-opening arranged to be normally closed by a pivoted plate positioned in front of said window, said plate having an upwardly-inclined cushioned flange-member supporting the front edge of said window along its entire length.

16. A silencer-cabinet for a typewriting machine including a cover having a visual opening, a pair of hinged leaves normally closing the opening and conditioned to be opened in unison, and means within said cabinet connecting said leaf-members, there being a counterbalance means connected to one of said members tending to close both of said members.

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