March 30, 1926. 1,578,935

B. C. STICKNEY

TYPEWRITING MACHINE

Original Filed Jan. 24, 1922

Fig. 1.

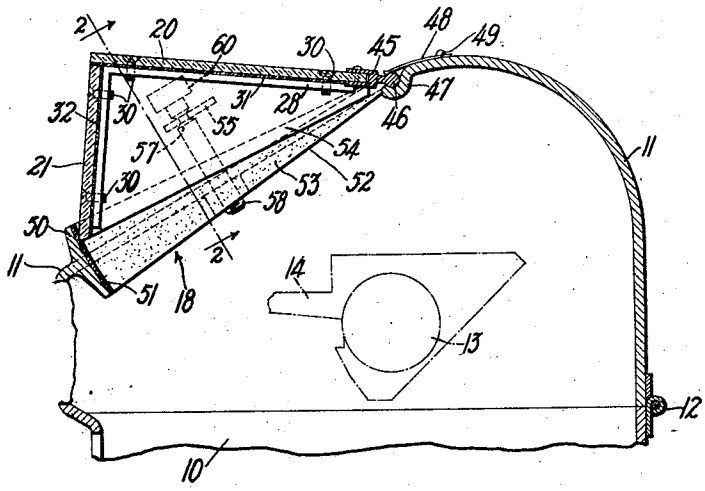
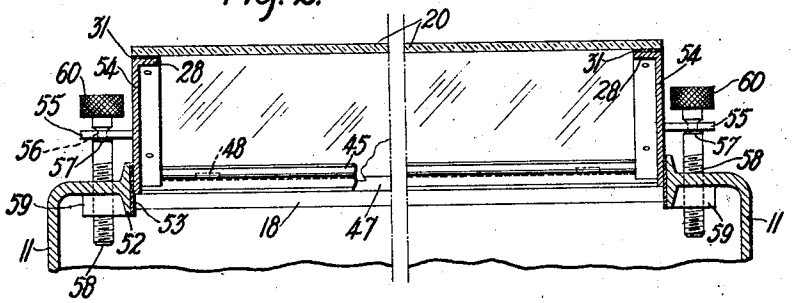



Fig. 2.




Inventor:

Burnham C. Stickney

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# UNITED STATES PATENT OFFICE.

BURNHAM C. STICKNEY, OF RUTHERFORD, NEW JERSEY, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

## TYPEWRITING MACHINE.

Original application filed January 24, 1922, Serial No. 531,353. Divided and this application filed September 14, 1923. Serial No. 662,610.

*To all whom it may concern:*

Be it known that I, BURNHAM C. STICKNEY, a citizen of the United States, residing in Rutherford, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Typewriting Machines, of which the following is a specification.

The present invention relates to sound-deadening casings for typewriting machines, and more particularly to the window thereof through which the printing is visible to the operator. This is a division of application Serial No. 531,353, filed January 24, 1922 (now Patent No. 1,553,480, dated September 15, 1925).

In a casing of this character, the top is ordinarily arched upward from the rear to accommodate the carriage of the typewriting machine; and, to eliminate unnecessary bulk and weight, it is thence sloped downward and forward to the front of the casing. This slope is also desirable to bring the lower edge of a rectangular window opening well below the line of vision to the printing point. The window has usually been a flat window set in the opening of this forwardly-sloping part of the top of the casing. It has been found that lights, when in certain positions, and usually above the typewriter desk or stand, are objectionably reflected into the eyes of the operator by such a window; and various expedients, such as having the window-pane angularly adjustable, within moderate limits, have heretofore been resorted to for diversion of such objectionable reflections.

It is an object of the present invention to substitute, for the flat sloping window-pane, a window comprised of a plurality of panes set at an angle to one another, and set at such angles that no light, properly positioned with reference to the operator and the machine, will be objectionably reflected to the operator. In the preferred form of the invention, I provide a window with two such panes, one a horizontal pane, which will cause the rays from a light, over the stand or desk, to be reflected upward, above the operator's line of vision, and the other a vertical pane, which will cause any rays reflected therefrom to pass below the operator's line of vision. Either the vertical or the horizontal pane may be in the operator's line of vision of the platen, and the other pane will serve to assist in the illumination of the interior of the casing. Only the pane which is in the operator's line of vision of the platen need be transparent; the other pane may be translucent, and, if desired, may have a ground outer surface, so that there can be no objectionable reflection therefrom, regardless of the position of the light.

In the present form of the invention, the window is L-shaped and preferably inverted so as to extend outwardly from the casing. With this arrangement the space in the casing is not unduly occupied by the window, which space is otherwise desirable in the casing.

A further object of the invention is the provision of means whereby the window may be angularly adjusted to divert reflections of improperly positioned lights. In this connection, it will be understood that the invention is not restricted to a window, the panes of which are set vertically and horizontally, or at right angles to each other, or even to a window in which there are but two panes. In some forms of the invention, one of the panes need not be of light-transmitting material.

From the complete novel disclosure found in the above-mentioned prior application, it can plainly be seen that this invention is applicable for an easy and simple arrangement whereby the window thereof may be made interchangeable with the ordinary flat sloping window, so that one or the other may be used according to lighting conditions or test; or may be designed to be inverted, that is to say, may be set so as to be concaved as well as convexed with respect to the outside cover whenever occasion demands such modified forms.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a view in cross-sectional side

elevation of a sound-deadening typewriter-casing embodying the features of the present invention, the platen and the platen-carriage of the machine being indicated in dotted lines therein.

Figure 2 is a front view in cross-section on line 2—2 of Figure 1.

Referring to the drawings, the casing is shown as comprising a body-portion 10 and a cover-portion 11 hinged at 12 to the body-portion. The casing is preferably provided with a sound-deadening lining (not shown). The position of the platen is indicated in dotted lines at 13, Figure 1, on a carriage 14, also indicated in dotted lines. A slot, not shown which extends longitudinally of the front wall of the casing, is normally closed by suitable means not shown. Through the slot may protrude the usual line-space and carriage-release levers and carriage-return arm, which are not shown, but which may be suitably mounted on the typewriter carriage, and which move along the slot.

The top of the cover is provided with an opening 18 for a window of glass or other transparent material, through which the operator may observe the printing on the platen 13. The casing-cover is preferably a casting having means thereon for controlling the swinging of the window within the opening.

The window may comprise a horizontally-disposed pane of glass 20 and a vertically-disposed pane 21 both supported on the flanges 28 and 29 of the pane-supporting plates 54, as shown in Figures 1 and 2. To hold the panes of glass 20 and 21 to flanges 28 and 29 of plates 54, any conventional means may be used as by screws 30 having heads countersunk in the glass panes. Packing strips 31 and 32 are preferably inserted between panes 20 and 21 and flanges 28 and 29 of the plates 54, and the packing 31 extends across the top of the front pane 21 where the pane 20 overlies the same. The rear edge of the horizontal pane 20 has a U-shaped strip 45 preferably of metal secured thereto and to the plates 54 by any suitable means. Thus the strip 45 and plates 54 form a frame to support the window-panes 20 and 21. Binding strip 45 extends longitudinally of the rear edge of the pane 20 and has formed thereon a rounded bead 46, which is set into a correspondingly rounded recess 47 formed in cover 11 at the upper edge of the opening 18. For holding the bead 46 in the recess 47, there are provided guards or fingers 48, of which there are preferably two, one near each end of the window. The guards 48 are shown as flat metal pieces secured to the cover 11 by screws or rivets 49, and adapted to be swung or lifted, so that the bead 46 may be removed from its seat 47 when it is desired to remove the window bodily from the cover. The bead 46 and its seat 47 being round permit of easy angular adjustment of the window; and the guards 48 terminate short of the neck formed by the bead 46, so as not to interfere with such angular movement of the window.

In order that the window may have ample angular movement without opening joints in the casing, the forward reach of the window-frame opening is provided with a wide concaved flange 50 curved on an arc struck from the pivot-point at 46, and preferably lined with a strip 51 of sound-deadening material, such as felt, into which the lower edge of the vertical pane 21 may set in any angular position of the window. As shown in Figures 1 and 2, the side reaches of the window-frame opening also have flanges 52, wide enough and of such shape as to prevent opening of joints at the sides of the window, and the flanges 52 are also provided with strips 53 of felt.

To support and secure the window in adjusted position, suitable means may be provided as ears 55 projecting outwardly from plates 54. The ears 55 may be perforated, as at 56, to receive a reduced portion or neck 57 of the window-adjusting thumb-screws 58 which are threaded into lugs 59 of the casing cover 11. For turning the adjusting screws 58 a knurled head may be provided, and the shoulder formed by the reduced portion or neck 57 of the screws 58 is arranged to cause the window to lift or lower when the screws 58 are turned, and the perforations 56 in ears 55 are designed to allow for the angular movement of the window structure. One or two adjusting screws 58 may be used as required. In the disclosed arrangement the operator may observe the printing of the platen through the vertical pane 21, and the light rays striking down on the pane 21 will not be reflected into the operator's eyes.

With the lights situated in suitable positions, a transparent or polished pane 20 would reflect the rays upward in a direction in which they would not strike the operator's eyes. In the event that a distant overhead light, in front of the typist, is reflected from the horizontal pane 20 it would annoy the operator. This objectionable reflection may be eliminated by swinging the window angularly, in one or the other direction, by means of the adjusting screws 58 in the manner described, thus reflecting the light rays above or below the normal line of vision to the printing point.

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. A sound-deadening casing, for a typewriting machine, having in the wall thereof a window comprising two portions of light-transmitting pane, offset from one another at an angle; one of said pane portions being transparent and being in the line of the operator's vision of the printing position on the platen when the machine is in the casing, a support for said panes pivotally mounted on the casing, and a screw engaging the casing and said support for adjusting the angular setting of the window to divert reflected light from the operator.

2. A sound-deadening casing, for a typewriting machine, having in the wall thereof a window comprising two portions of light-transmitting pane, offset at an angle from one another, one of said pane portions being transparent and in the line of the operator's vision of the printing position on the platen when the machine is in the casing, plates supporting said panes and closing the angular spaces at the sides of the window defined by the panes and the casing wall, a bead on one edge of the window to serve as a pivot therefor on the casing, an ear or lug on one of said pane-supporting plates, and a screw engaging the casing and said ear or lug for adjusting the window angularly on its pivot to divert reflected light from the operator.

3. A sound-deadening typewriter casing having an opening, a rectangular window in said opening hinged at one of its edges for adjustable movement to avoid objectionable reflection of light from the window, and means at the other three edges of said window for maintaining a sound-proof sealing between said three edges of the window and the corresponding edges of the window irrespective of the window adjustment.

4. In a sound-deadening casing for a typewriting machine, a work-view window-frame opening, an angular, two-pane window hinged therein at one of its edges to avoid objectionable reflection of light, said window-frame opening being curved on the side opposite the hinge to permit a close fit of the window in the opening irrespective of the window adjustment, and means for maintaining the sound-proof seal between the window and the frame.

5. A sound-deadening cabinet for a typewriting machine comprising an upper wall, a window in said wall, said window comprising two sections to form an inverted L-shaped window, and means to facilitate adjustment of said window with reference to exterior lights and the normal line of vision to the printing point of the platen.

6. A sound-deadening casing for a typewriting machine having a rectangular opening therein, a rectangular window to fit into said opening, a bead extending along one edge of said window, said casing having a recess or groove extending along one edge of said opening, said bead lying in said recess, and devices to hold the bead in the recess to hinge the window on said casing.

7. A sound-deadening casing for a typewriting machine having a rectangular opening therein, a rectangular window to fit into said opening, a hinge for said window, two thumb-screws to swing said window about said hinge to adjust the window to various angular positions, and two ears on said window, one extending from each side thereof, each thumb-screw having an annular groove in which one of the ears engages to embrace the screw, said screws being threaded into said casing.

8. A sound-deadening casing for a typewriting machine comprising a top wall having a rectangular opening therein, said wall slanting downwardly and forwardly so as to bring the lower edge of the opening considerably below the line of vision to the printing point, and a window-pane to close said opening, said window-pane being composed of a substantially vertical section and a substantially horizontal section, thus forming an inverted L-shaped window, the corner of which projects out of the casing, so as not to unduly utilize otherwise desirable space within the casing.

9. A sound-deadening casing for a typewriting machine comprising a top wall having a rectangular opening therein, said wall slanting downwardly and forwardly so as to bring the lower edge of the opening considerably below the line of vision to the printing point, a window-pane to close said opening, said window-pane being composed of a substantially vertical section and a substantially horizontal section, thus forming an inverted L-shaped window, the corner of which projects out of the casing, so as not to unduly utilize otherwise desirable space within the casing, said window being pivoted at one edge, a grooved flange on said casing at the opposite edge of said window with which said opposite edge may engage in all of the positions the window may occupy, and triangular end pieces closing the sides of said window.

BURNHAM C. STICKNEY.