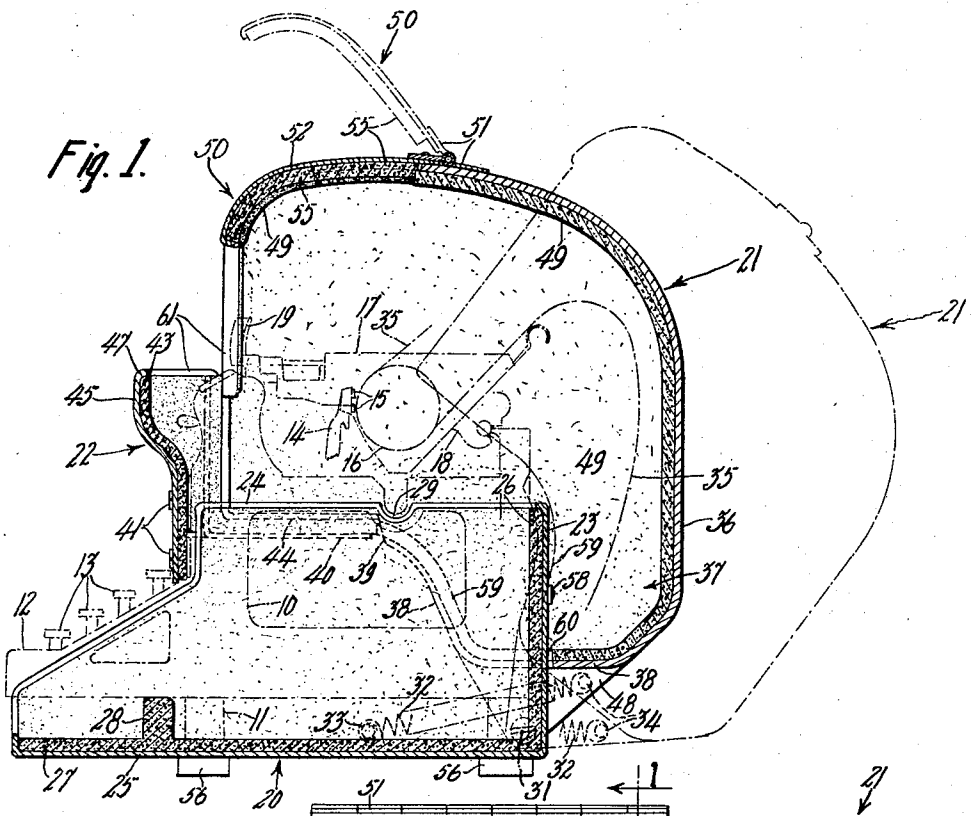
Oct. 26, 1926. 1,604,541

J. WALDHEIM

TYPEWRITING MACHINE

Filed Dec. 13, 1924 3 Sheets-Sheet 1

Fig. 1.



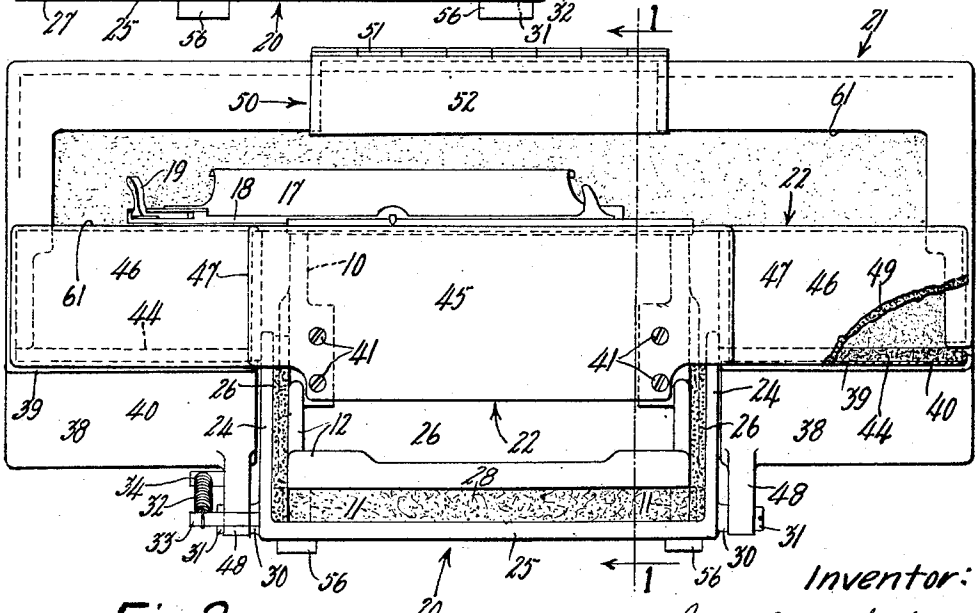


Fig. 2.

Inventor:
John Waldheim
by B. C. Stickney
Attorney

Oct. 26, 1926. 1,604,541

J. WALDHEIM

TYPEWRITING MACHINE

Filed Dec. 13, 1924 3 Sheets-Sheet 2

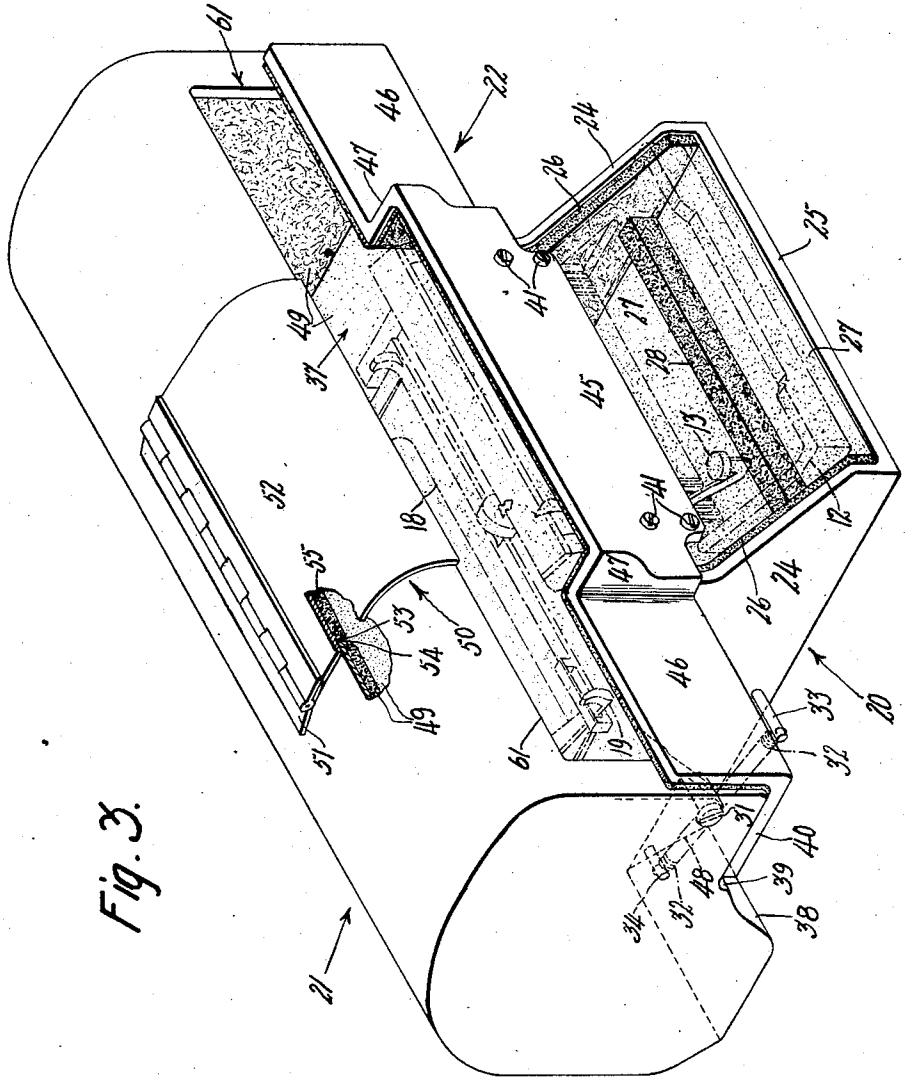


Fig. 3.

Inventor:
John Waldheim
by Bakewell
Attorney

Oct. 26, 1926. 1,604,541

J. WALDHEIM

TYPEWRITING MACHINE

Filed Dec. 13, 1924 3 Sheets-Sheet 3

Fig. 4.

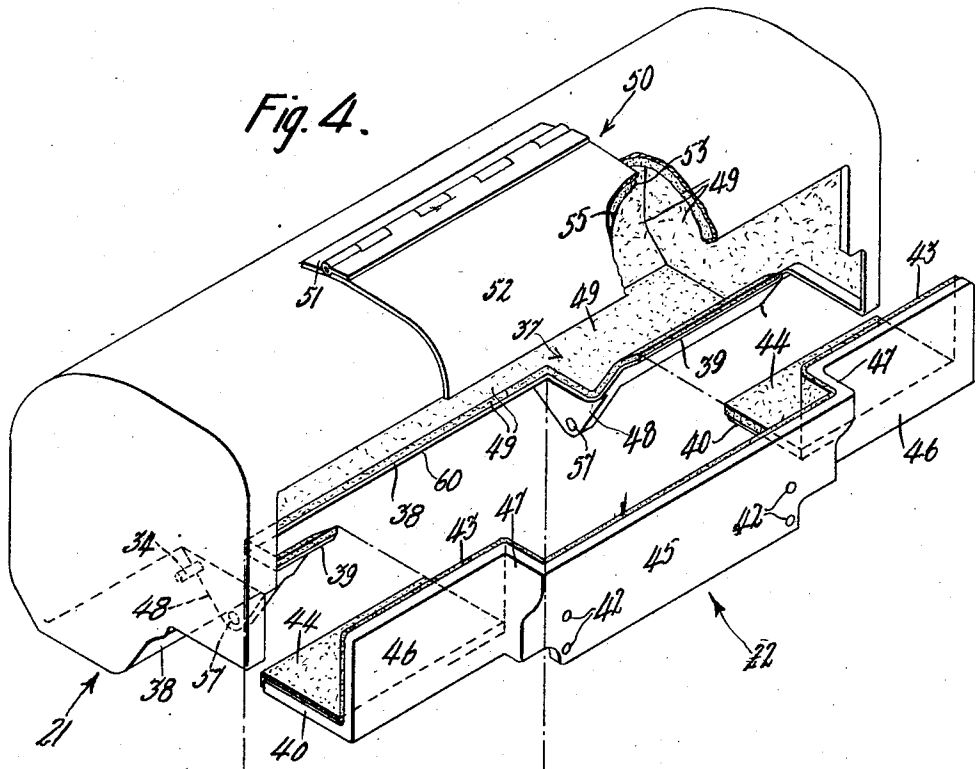
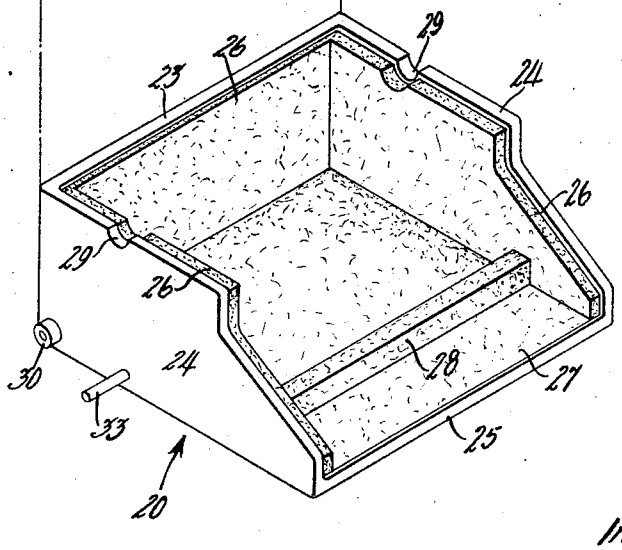


Fig. 5.



Inventor:
John Waldheim
by D. C. Stickney
Attorney

Patented Oct. 26, 1926. 1,604,541

UNITED STATES PATENT OFFICE.

JOHN WALDHEIM, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPEWRITING MACHINE.

Application filed December 13, 1924. Serial No. 755,617.

This invention relates to sound-deadening casings for typewriting machines, and one of its features is that it may be applied to the typewriting machine with little or no alteration thereof.

A feature of this invention, which embodies improvements on my application No. 750,542, filed November 18, 1924, is to produce a more efficient sound-deadening casing by enclosing more of the machine, especially the borders where the cover comes in contact with the casing, while permitting free access to the carriage-control finger-pieces or levers.

The sound-deadening casing of this invention comprises a lower box-like member which encloses or is packed around the typewriter framework, and a cover or hood which co-operates with a front closure fast on the typewriter frame to effectively seal the sounds arising from the operation of the machine. The hood or cover is closed at the ends, top and rear but is open at the front, so that a sufficient aperture is there provided through which the hand of the operator may be thrust for manipulating the carriage-controlling levers. The hood or cover is pivotally mounted upon the lower member and may be swung open when required to change the work-sheet, or for any other reason, although the operations necessary for the normal operation of the carriage and the paper feeding may be performed while the cover is in a closed position through the front opening in the cover.

In order to further facilitate the operation of the typewriting machine with the cover closed, and in order that erasures may be made on the work-sheet without the necessity of swinging the cover, there is provided a door at the top of the cover in front of the printing point on the platen, so that when it is desired to erase a portion of the written matter on the work-sheet, the door may be swung open on a hinge provided for the purpose, and the hand may reach through the opening to the work-sheet.

Another feature of this invention is the provision of a front closure fastened to the frame of the machine in place of the regular front plate used to guard the type-bars. Said front closure extends laterally beyond the width of the typewriter and has at the ends rearwardly-extending plates under the carriage, which co-operate with the cover, substantially fitting the borders of said cover for effectively sealing said borders.

Another feature relates to the cover of the casing, which is provided at the rear with a pocket for receiving the overhanging end of the work-sheet. Said pocket extends the full length of said cover and is formed by the cover extending rearwardly beyond the lower member, so that a channel-like section is formed between the rear wall of the lower member and the rear wall of the cover. The lower wall enclosing the pocket for receiving the work-sheet at the rear of the casing forms an integral part of the cover and extends forwardly to meet the outer side of the rear wall of said lower member.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a vertical cross-sectional view on the line 1—1 of Figure 2, showing the typewriter housed in the casing.

Figure 2 is a front view in elevation, showing the opening at the front through which the carriage-control levers are operated.

Figure 3 is a perspective view of the casing, showing the front opening through which the keyboard protrudes and the opening for operating the carriage-control levers.

Figure 4 is a dissected perspective view, showing the canopy or cover and the front closure.

Figure 5 is a perspective view of the lower member or box for housing the typewriter frame.

Figures 4 and 5 may be read together.

The Underwood standard typewriting machine comprises a main frame 10 supported by feet 11, and has a forward extension 12 carrying banks of keys 13 operating type-bars 14 to cause types 15 to strike against a platen 16 journaled in a platen-frame 17. The platen-frame forms part of a carriage 18 mounted for letter-feed movement upon rails carried on the main frame. The carriage may be provided with various forwardly-extending operating devices such as a line-spacing lever 19 and other levers actuating and controlling the operation of the carriage and the platen.

It is for the deadening of the sounds arising from the operation of a typewriting machine of this general character that this sound-deadening casing is provided.

Referring more particularly to Figures 4 and 5, in which the sections forming a part of said casing are shown, it will be noted that the casing comprises three main parts or sections, namely, a lower member 20, a canopy or cover 21 and a front closure 22.

The lower member 20 is designed to snugly fit over the typewriter main frame, and comprises a rear wall 23, two side frames 24 and a base 25, which forms an integral part of said side frames and said rear wall. For deadening the sound arising from the typing operation there is provided a felt lining 26 fast to the inner sides of the side frames 24 and to the inner side of the rear wall 23. There is also provided a felt covering 27 on the base 25 for preventing the exit of sound, and upon said covering a cross-bar 28 of the same material serves as a closure under the typewriter keys. A portion of the side frames is cut forming indentations 29 for clearing certain downwardly-extending parts of the typewriter carriage. Bosses 30 at the rear of each side frame serve as supports for screws 31 on which the cover 21 is swung.

In order that the cover 21 may be held either closed or open when swung on the screws 31, there is provided a spring 32 which is held under tension between spring-studs 33 and 34 respectively fastened to one of the frames 24 and to the cover 21. It will be noted that when the cover 21 is open, as shown in dot-and-dash lines in Figure 1, the two spring studs 33 and 34 are in a dead line with the screws 31, so that the spring pressure at this point is neutralized and the cover is held open by its own weight and is thrown to the rear of the casing. When the cover is swung forward in order to close it, the spring 32 then actuates and assists in closing the same and holds it in its closed position, as shown in full lines in Figure 1. It will be noted that the cover is provided with two downwardly-extending ears 48 having holes 57 which serve as the bearings on which it is swung, and that the cover is also provided with a lining 49 fast to the inner sides of its walls for further assisting in deadening the sounds arising from the operation of the typewriter.

As one of the main features of this invention is the provision of a casing in which all the borders are closed, with the exception of a comparatively small opening along the front of the casing for rendering accessible the carriage-control levers, the canopy or cover is designed to snugly fit the borders of the lower member and the front closure, so as to confine the sounds as much as possible within the casing. It is also desirable to form a pocket 37 at the rear of the typewriter for a work-sheet 35, and to this end a rear wall 36 of the cover 21 is extended to the rear of the machine beyond the rear wall 23 of the lower member 20, so as to form the pocket 37 along which the work-sheet 35 may travel. The pocket is closed at the bottom by means of a forwardly-extending portion 38 which terminates at 60 near said rear wall 23. The portion 38 is further extended at the ends, forming edges 39 disposed for abutment against rearwardly-extending walls 40, which form an integral part of the front closure 22.

The front closure 22 is fastened to the typewriter main frame 10 my means of screws 41 through the holes 42 in the front closure 22, and takes the place of the usual front plate in the Underwood machine. There is provided a felt lining 43 fast to the inner sides of the front closure 22, and said lining has an extension 44 to cover the rearwardly-extending walls 40. It will be noted that the front wall of the front closure 22 is stepped and comprises a central portion 45 and two end portions 46 connected by right-angle bends 47.

When typewriting it is sometimes necessary to make erasures on the work-sheet without removing the same, and in such cases the platen of the machine upon which the work-sheet is supported is used as a backing. In order that the cover 21 may remain closed while a portion of the work-sheet is being erased, there is provided a comparatively small door 50 at the top of the cover. The door 50 is mounted on a hinge 51 and may be either swung open or closed, and it is so constructed that the joint between itself and the cover is substantially sound-proof. In Figure 3 the border of the door is shown in cross-section, and comprises a door-plate 52 and a downwardly-extending rib 53 snugly fitting against another downwardly-extending rib 54, which form an integral part of the cover 21. Said rib 53 serves to confine the edges of a felt lining 55 fast to the door-plate 52.

The casing is designed to stand on a table, and in order that the table may be protected there are provided rubber feet 56 under the lower member 20.

For limiting the travel of the cover 21, there is provided a stop device 58 fastened to the rear wall 23 of the lower member 20, which co-operates with an edge 59 of the cover 21, as shown in Figure 1.

It will be seen that the casing is of such construction that when the typewriter is operatively installed therein, there is but one outlet for the sound arising from the operation of the machine, which is the opening 61 provided in the front wall of the cover 21. Thus the present invention provides a sound-deadening casing which, although not so efficient in its noise-eliminating properties as other casings having slot-sealing cushions at the front through which the carriage-controlling levers protrude,

may, nevertheless, be used to advantage in many places where the highest degree of noise-eliminating efficiency is not necessary, as, for example, in large rooms or offices where the machine may be further removed from other workers. It will be understood that the cost of manufacturing this device is comparatively lower than that of other casings having slot-sealing cushions, and for this reason it may in many cases be found that its use is more advantageous.

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 including a carriage, of a sound-deadening casing comprising a lower member, a hinged cover having end pocket portions laterally overextending said lower member, and a front closure co-operating with said cover to complete sound-proof end pockets for enclosing the carriage when the same is moved to its extreme position, said carriage having handles completely within said casing, and the latter having a hand-opening extending along its front and affording access to said handles.

2. The combination with a typewriting machine including a carriage, of a sound-deadening casing comprising a lower member, a hinged cover having end pocket portions laterally overextending said lower member, and a front closure co-operating with said cover to complete sound-proof end pockets for enclosing the carriage when the same is moved to its extreme position, said carriage having handles completely within said casing, and the latter having a hand-opening extending along its front and affording access to said handles, and said cover forming a sound-proof pocket at the rear of the casing in which a work-sheet on the carriage may slide therealong when the carriage is moved in letter-feeding direction.

3. A sound-deadening casing for a typewriting machine, comprising a lower member and a cover pivotally mounted on said lower member, operably enclosing said machine, except for a frontal opening between the lower member and the cover, disposed for access to manually operate the carriage of said machine without displacement of said cover, said carriage having handles completely enclosed by said casing, and said frontal opening affording the hand of the operator access to said handles.

4. A sound-deadening casing for a typewriting machine, comprising a shoe-like lower member having a bottom, sides and back provided with a lining of sound-deadening material, a cover or hood pivotally mounted on said lower member also provided with a lining of sound-deadening material, and a front closure co-operating with said lower member and said cover for operably enclosing said machine except for a frontal opening through which the carriage of the machine may be operated, the rear wall of said cover being placed beyond the rear wall of said lower member, forming a channel closed at the bottom by a forwardly-extending portion which forms an integral part of the rear wall of said cover, said carriage having handles completely enclosed by said casing, and said frontal opening affording the hand of the operator access to said handles.

5. The combination with a typewriting machine, of a sound-muffling casing, said casing comprising a body-part to fit around the frame of said machine, a cover pivoted on said body-part, and a detachable front wall, said front wall having rearward extensions to form, with said cover, carriage-chambers extending beyond the sides of said body-part.

6. The combination with a typewriting machine, of a sound-muffling casing for said machine, said casing comprising a body-part in the form of a pack and having side walls, a rear wall and a floor fitting closely to the frame of said machine to subdue the vibrations thereof, said casing comprising also a cover, said cover being pivotally supported on said body-part and extending beyond the side walls of said body-part, side walls on said cover, a separate front plate for said casing, said front plate extending the full length of the cover, and floor-portions extending laterally to the side walls of the cover and co-operative with said cover and said front plate to form extension-chambers accommodating the travel of the carriage.

7. The combination with a typewriting machine, of a sound-muffling casing for said machine, said casing comprising a shoe-like body-part having side walls, a rear wall and a floor to fit close to the frame of said machine, said casing comprising also a cover, said cover being pivotally supported on said body-part and extending beyond the side walls of said body-part, side walls on said cover, and a front plate, said front plate having rearward extensions to form, with said cover, carriage-chambers extending beyond the side walls of said body-part.

8. The combination with a typewriting machine, of a sound-muffling casing for said machine, said casing comprising a shoe-like body-part having side walls, a rear wall and a floor to fit close to the frame of said machine, said casing comprising also a cover, said cover being pivotally supported on said body-part and extending beyond the side walls of said body-part, side walls on said cover, and a separate front plate for said casing, said cover having a paper-pocket

comprising a front wall, said front plate having rearward extensions to engage the front wall of the paper-pocket to form, with said cover, carriage-chambers extending beyond the side walls of said body-part.

9. The combination with a typewriting machine, of a sound-muffling casing for the machine, said casing comprising a shoe-like pack to fit around and embrace said machine and a cover supported on said pack, said cover comprising top, rear and side walls, and a pocket at the rear lower corner of said cover to receive the overhanging edge of a work-sheet extending from the carriage of the machine, said pocket having a cutout therein into which the rear part of the pack or shoe extends.

10. The combination with a typewriting machine, of a sound-muffling casing for the machine, said casing comprising a shoe-like pack to fit around and embrace said machine and a cover supported on said pack, said cover comprising top, rear and side walls, a pocket at the rear lower corner of said cover to receive the overhanging edge of a work-sheet extending from the carriage of the machine, said pocket having a cutout therein into which the rear part of the pack or shoe extends, and a front plate, said front plate having rearward extensions disposed between the side walls of said pack and the side walls of said cover, said extensions projecting rearwardly to meet the paper-pocket.

JOHN WALDHEIM.