March 6, 1928. 1,661,392

B. C. STICKNEY

TYPEWRITER CABINET

Filed May 14, 1920 4 Sheets-Sheet 1

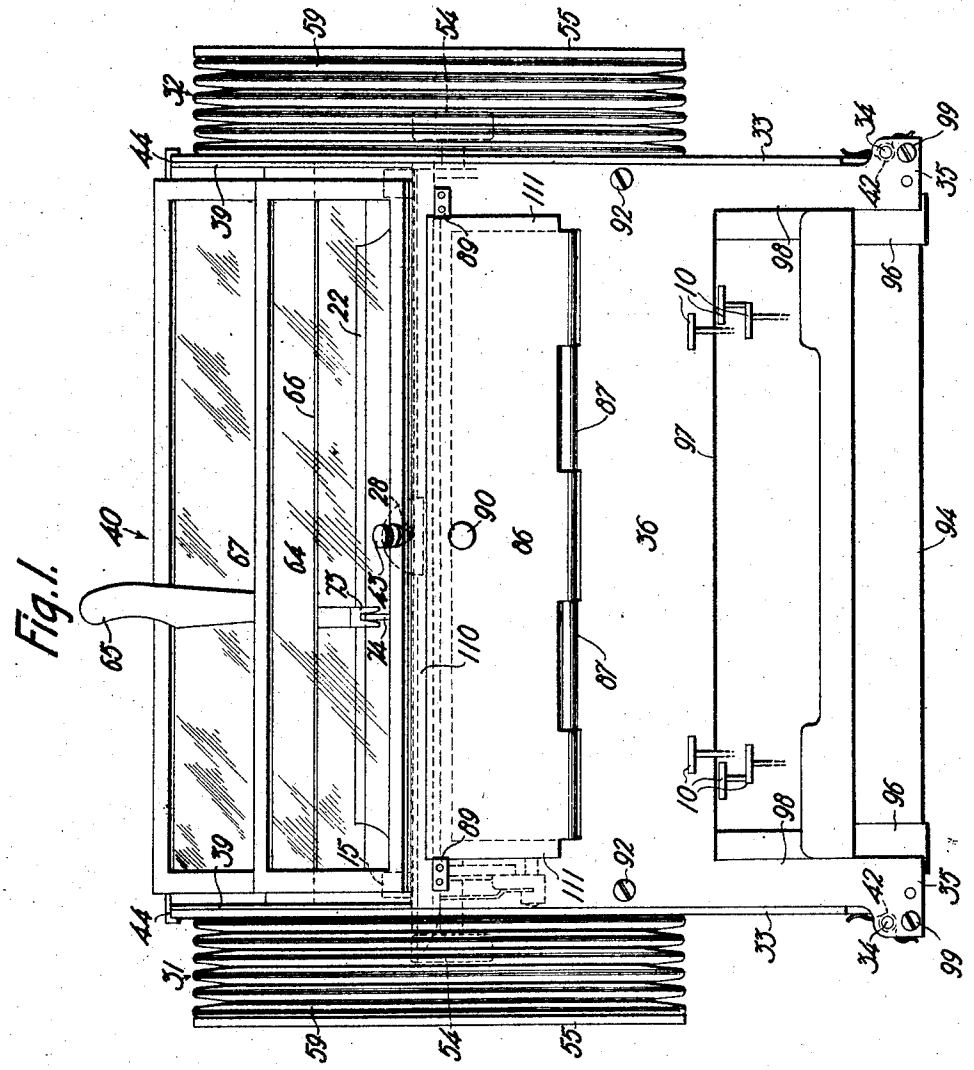


Fig. 1.

Inventor:
Burnham & Stickney

March 6, 1928.

1,661,392

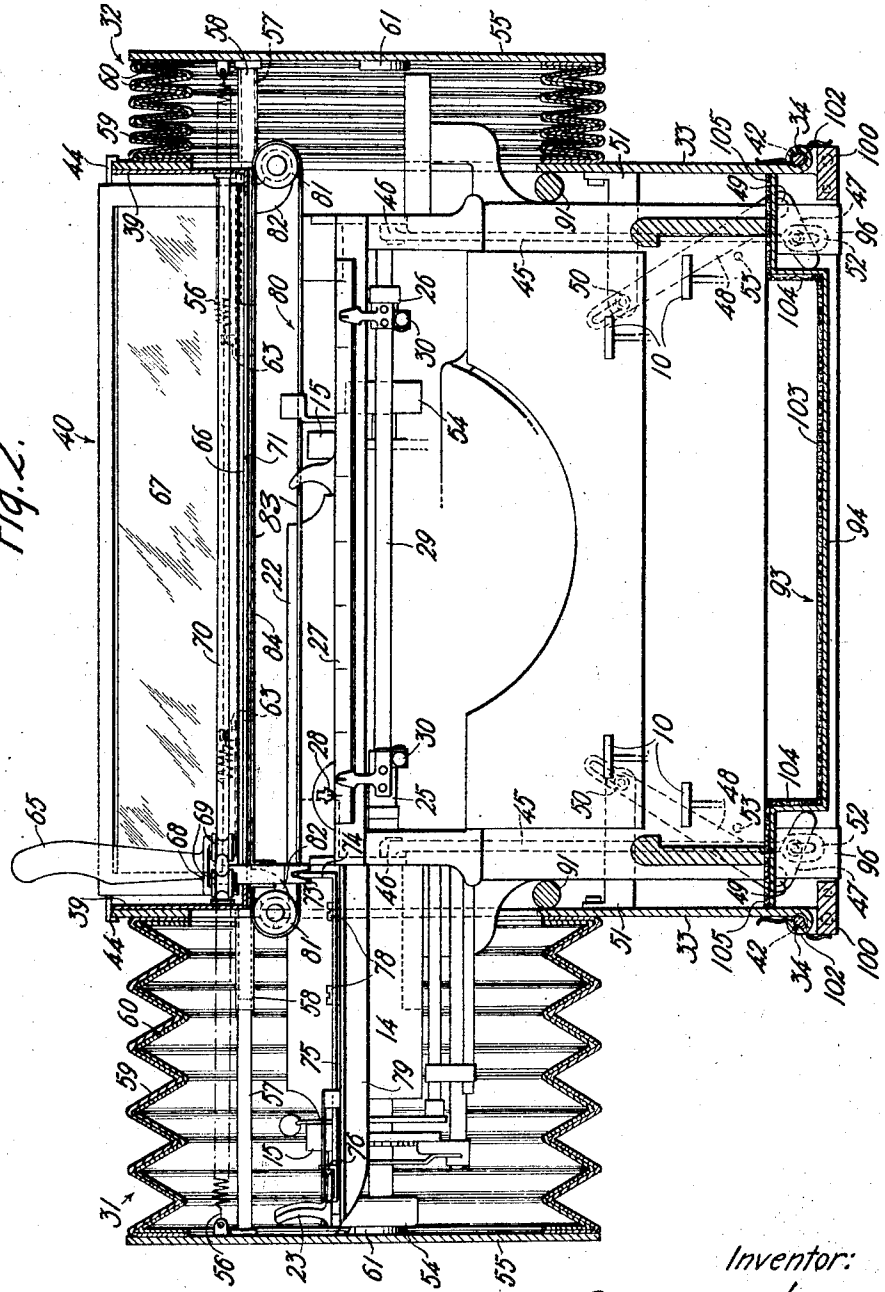
B. C. STICKNEY

TYPEWRITER CABINET

Filed May 14, 1920

4 Sheets-Sheet 2

Fig. 2.



Inventor:

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TYPEWRITER CABINET

Filed May 14, 1920 4 Sheets-Sheet 3

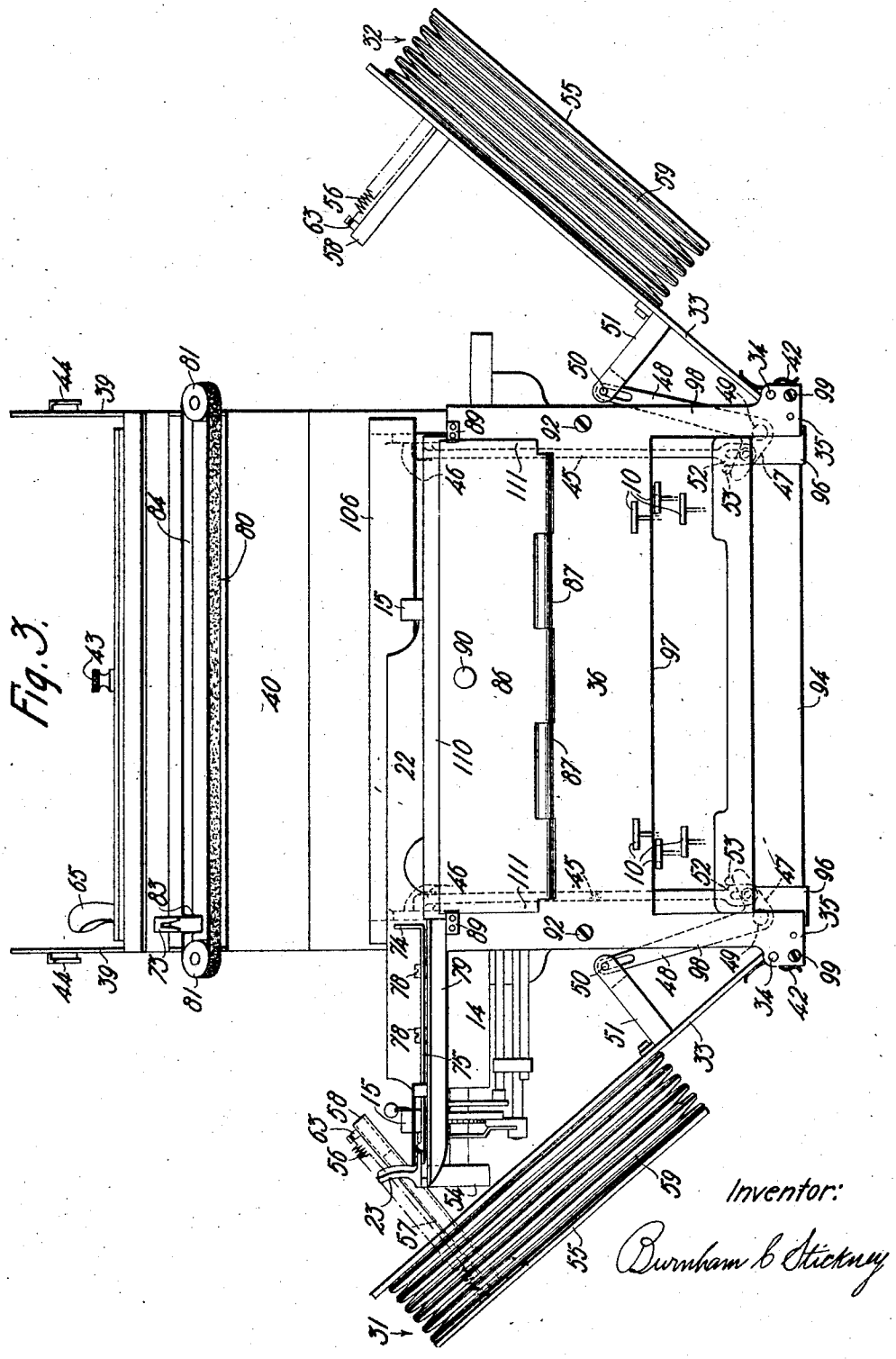


Fig. 3.

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B. C. STICKNEY

TYPEWRITER CABINET

Filed May 14, 1920 4 Sheets-Sheet 4

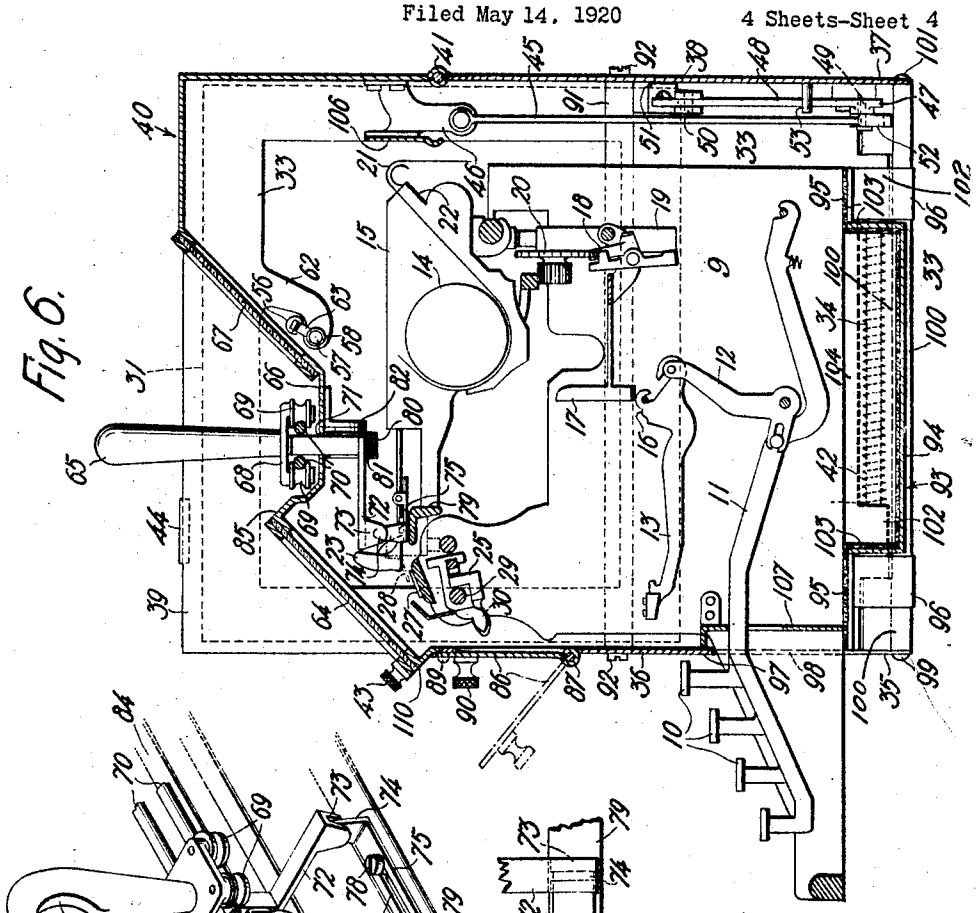


Fig. 6.

Fig. 5.

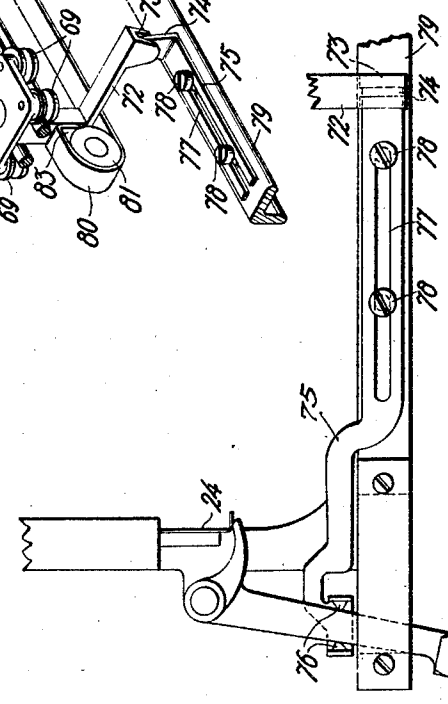


Fig. 4.

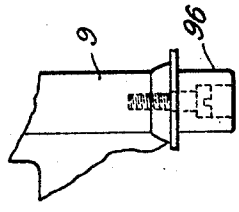


Fig. 7.

Inventor:

Burnham & Stickney

Patented Mar. 6, 1928. 1,661,392

UNITED STATES PATENT OFFICE.

BURNHAM C. STICKNEY, OF ELIZABETH, NEW JERSEY.

TYPEWRITER CABINET.

Application filed May 14, 1920. Serial No. 381,259.

This invention relates to key-operated machines, and more especially to devices for reducing the noise incident to the operation of such machines.

The invention is herein illustrated as adapted to an Underwood Standard typewriting machine, which is enclosed in a sound-proof case comprising a collapsible or pleated bellows portion at each side or end of the case, each collapsible portion being extensible by the projection of the typewriter carriage from the adjacent end of the machine. The machine and casing may rest on any suitable support or base.

To permit easy access to the typewriter carriage, especially for facilitating the insertion of work-sheets around the platen thereof, the device may be provided with a removable cover, preferably hinged at the back, and each collapsible portion may be automatically swung down or back at the lifting of the cover, thus giving complete access to the platen, irrespective of the position of the typewriter carriage.

The front or top of the cover, or both, may be largely made of transparent material to enable the typist to view the typed matter upon the work-sheet, and to admit sufficient light for the easy reading of said matter.

In order to hold the collapsible portion firmly in place in the ordinary operation of typewriting, the cover may be provided with latches which fit down over the frames on which the collapsible portions are carried, thus enabling each latch to take the strain when the typewriter carriage expands the adjoining collapsible portion.

To effect the operation of line-spacing, there may be provided a handle, which travels along the cover and is adapted to return the carriage by movement in the usual direction. This handle may extend through a slot in the cover, and engage a connection to the usual line-space lever, thus enabling the handle to operate said lever and return the carriage by drawing on the lever. Provision may be made of means to keep the slot sealed irrespective of the position of the handle.

Provision may also be made of a sound-arresting partition or baffle beneath the key-levers and co-operating at its front with the comb through which the key-levers pass, to reduce the noise escaping at the front of the machine.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a face view of an Underwood typewriting machine having the present invention applied thereto.

Figure 2 is a similar view, but partly in section, and showing the carriage near one end of its travel, and the accordion-like or pleated collapsible portion for that end being shown in section.

Figure 3 is a view similar to Figure 2, but with the cover raised.

Figure 4 is a plan view of part of the line-space connections.

Figure 5 is a fragmentary perspective view of the handle for operating the line-space lever.

Figure 6 is a sectional side view of an Underwood typewriting machine in the casing with the casing closed.

Figure 7 shows the usual Underwood rubber foot with its usual attachment screw.

In the Underwood Standard typewriting machine, comprising the usual Underwood open framework 9, character keys 10 depress key-levers 11, thereby operating bell-cranks 12, to swing type-bars 13 upwardly and rearwardly against the front of a platen 14, which is rotatably mounted in a traveling carriage 15. Whenever a key 10 descends, it causes a heel 16 on its type-bar to strike a universal bar 17, and thereby swing rearwardly the usual dogs 18 to permit the carriage to be drawn along one step by the usual spring barrel 19, said dogs being effective on the usual escapement wheel 20 and its connections to the carriage 15.

When preparing to typewrite, the typist passes a work-sheet 21 over a rear paper-table 22 and up in front of the platen, it being held in place by the usual devices (not shown). In the ordinary operation of typewriting, after a line has been typed upon the work-sheet 21 and the carriage has been, in the meantime, fed along to the left, the typist returns the carriage by actuating the line-space lever or handle 23 to return the carriage and actuate the usual line-space wheel by the usual slide 24.

The travel of the carriage in either direc-

tion is usually limited by the margin stops 25 and 26, which are adapted to be adjusted along the front scale 27, along which moves the usual pointer 28 upon the typewriter carriage. The margin stops 25 and 26 are usually slidable on a rod 29, and are adapted to be adjusted by means of their finger-pieces 30.

The device for suppressing the sound or noise of typewriting is shown as comprising a left-hand bellows 31 and a right-hand bellows 32, each mounted upon an accordion or bellows frame-plate 33, each plate journaled at its bottom upon a shaft or rod 34 carried in ears 35 projecting endwise from the bottom of a front plate 36, which is adapted to cover the front of the typewriter, and lies between the top bank of keys 10 and the front of the frame. At its rear end, each shaft or rod 34 is carried by a similar ear 37 extending endwise from a rear plate 38, said plates being either of copper or some other substance or structure, which tends to deaden sound. Normally, each frame-plate is held in an upright position, so that its upper front corner lies against an end plate 39 rising vertically from a cover 40, which is hinged to the rear plate 38 by a hinge 41 behind the platen and at about the height of the platen. For holding the frame-plates 33 in their upright positions, there is provided a comparatively strong spring 42 encircling each shaft or rod 34.

When the typist desires access to the carriage 15, she lifts a handle or finger-piece 43 which is fast upon the cover 40 at the center thereof, lifting the cover 40 up around its hinge 41. This automatically throws the pleated portions or members 31 and 32 from their Figure 1 to their Figure 3 position. Normally, the frame-plates 33 are held against the plates 39 by ears 44, which extend from the tops of the plates 39 and overlap the adjacent frame-plate 33. As soon, however, as the typist lifts the handle 43, the ears 44 are carried clear of the frame-plates 33, and then each frame-plate is thrust outwardly because a link 45 for each frame-plate is pivoted to its inwardly projecting arm 46 fast upon the inside of the cover 40. Each arm 46 is near the hinge 41, with the result that, when the cover is thrust back, each link 45 is drawn upwardly to rock the horizontal arm 47 of its bell-crank 48 pivoted at 49 on the inner side of the back plate 38. Each bell-crank 48 is connected by a pin-and-slot connection 50 to an arm 51 projecting inwardly from the adjacent frame-plate 33, with the result that as the cover 40 swings upwardly and backwardly, each frame-plate is drawn to the Figure 3 position against the tension of its spring 42.

In order to give the proper throw to the frame-plates 33, each link 45 is connected to its bell-crank arm 47 by a pin-and-slot connection 52, and is arrested at the limit of its throw by a fixed stop 53 fast upon the rear plate 38. Normally, each accordion or bellows portion is collapsed, as seen in Figure 1, or at the right hand of Figure 2.

During the operation of typewriting, the carriage 15 travels to the left, as described above, and pushes outwardly, by means of the usual knob 54, the end plate 55 of the bellows 31, thus expanding the bellows against the tension of its spring 56, which normally tends to collapse it, but which may be omitted when not desired. In order to keep the bellows from sagging, each end plate 55 is provided with a rod or post 57, which is fast to the plate and projects inwardly through a sleeve 58 projecting both outwardly and inwardly from its frame-plate 33 and serves for a guide. When the bellows is in collapsed condition the enlarged base of the rod 57 engages the outer end of the sleeve 58.

The bellows may be of any desired or suitable construction, and are each herein shown as comprising an outer layer 59, which may be of leather or imitation leather, and an inner layer 60 of suitable flexible or sound-proof textile material. The end plate 55 is made of any suitable material to make it a poor conductor of sound, and it is provided with a projecting disk 61 against which the knob 54 bears when the bellows is expanded.

In order to bring the sleeves or guides 58 low enough down to enable them to clear the top safely in opening, and yet at the same time stand clear of the carriage 15, the sleeves are mounted upon the plates 33 by downwardly projecting ears 62, which extend a considerable distance toward the platen and carry the posts 63 upon which the bellows springs 56 are anchored.

To enable the typist to view the typed lines upon the work-sheet 21, as it lies upon the platen 14, the front of the cover 40 is provided with a transparent cover or plate 64, sloping at an angle of about 45°, so that the typist looks squarely through it at the typed matter.

For actuating the line-space lever 23 from the outside of the casing, there is provided a line-space handle 65, which is slidable across a depressed flat space 66 in the cover 40 lying behind the transparent plate 64 and in front of a transparent plate 67, which stands above the platen and serves to admit light from above more directly upon the work-sheet as it lies rearwardly across the top of the platen. The handle 65 is mounted on a small truck 68 comprising four grooved wheels 69 adapted to run upon a pair of round rails 70, which extend along and above the intermediate section 66 of the cover 40 and are mounted in the vertical plates 39 of the cover 40. The handle 65 runs in a slot 71 in the intermediate por-

tion 66 of the cover, and is provided with a forwardly extending arm 72 having a fork 73, which is adapted to engage the upturned end 74 of a slide 75, which extends to the end of the carriage and there carries a fork or pair of lugs 76 lying on each side of the line-space lever 23, so that the two swing together.

The slide 75 is provided with a slot 77 through which project shouldered screws 78 threaded into the front bar 79 of the carriage. In order to close the slot 71, in which the handle 65 runs, the handle is fast to the ends of a belt 80 of suitable flexibility, which is carried around a pulley 81 at each end, said pulleys being journaled in ears 82, projecting downwardly from the cover section 66, and the idle bight 83 of the belt is carried above the carriage, so that the upper stretches 84 of the belt always maintain the slot 71 in the cover section 66 sealed against sound and dust.

To give a wider field of vision through the plate 64, the plate may extend up above the level of the section 66 where the handle 65 has its runway, and the section 66 may be provided with a downwardly slanting arm or plate 85, which extends downwardly from the top of the plate 64.

To afford access to the margin stops 25 and 26, there may be provided a smaller front cover 86, which is hinged at 87 upon the front plate 36 of the casing and is provided with a suitable latch, which may take the form of upturned spring lugs 89 at the ends of the cover 86. There may also be provided a finger-piece 90 to enable the typist to easily open the cover 86. The plate 36 may be held to the rear plate 38 by shouldered spacing rods 91, one at each side of the machine, into which suitable screws 92 are threaded.

The frame-plates 33 are preferably so designed that they come up against the ends of the rear plate 38 and the ends of the front plate 36, thus closing the whole end of the casing about the typewriter.

In order to close the bottom of the typewriter to deaden the noise, there may be provided a sound-deadening partition, or baffle, in the form of a bottom plate 93 having a depressed center 94, to allow room for full depression of any key-levers, and having ends 95 which are adapted to lie against the machine frame 9 and to be held thereto by the usual cupped rubber feet 96, which in said Underwood machine are held up by screws (not shown) threaded up into the legs of the machine frame, the screw-heads being located within the cups in the feet. The typewriter and casing may be set on any suitable base or support. Because the various levers used on special machines, such as carriage-back-space levers, might interfere, the front plate 36 is cut off at 97 just above the key-levers, and carried down at the side in legs 98, which form the lugs in which the shafts 34 are carried. The lower end of each leg 98 is held by a screw 99 to a bar 100, which extends from the front plate 36 to the rear plate 38 and is held to the latter by a similar screw 101.

Each shaft 34 supports its bellows-frame-plate 33 by downwardly-projecting ears 102 of said frame-plate. To cause the bottom plate 93 to transmit as little sound as possible, it may have an interior packing 103 of felt or some other sound-deadening material. The bottom plate 93 is turned up at its outer edges, as shown at 104 in Figure 2, thus bringing its outer ends 105 against the adjacent end plate 33, to prevent local escape of sound. Said plate 93, since it is fixed to the typewriter frame, properly locates the latter in the casing.

In order to prevent any work-sheet 21 from catching on the edge of a bellows-frame-plate 33, there is provided a deflector guide or plate 106, which is mounted on the ends of the arms 46, and serves to deflect the rear end of a work-sheet past the bellows-frame-plates.

If it be desired to more completely close in the typewriter, there may be provided a special comb plate 107, which extends upwardly from beneath the key-levers 11 resting on the turned-up front end 95 of the bottom plate 93, and extending above the key-levers 11 and then bent forward to lie against the back of the front plate 36. The comb plate 107 may be held in the typewriting machine in any desired way and its lower edge may be in close engagement with the sound-deadening material on the forward end 95 of the bottom plate 93.

The front plate 36 may extend upward on each side of the cover 86, and thus form a rest at its top edge 110 for the top cover. Since the hinge 41 is directly behind the edge 110, the top cover may come down and fit closely behind the front cover 86, which overlaps the plate 36 at its side edges 111, and is thereby held outwardly just clear of the top cover.

To assemble the typewriting machine in the sound-proof casing, the usual rubber feet 96 may be removed from the machine by unscrewing the usual screws which hold it, and then the element 103 and the noise-absorbing felt-lined bottom plate element 94 are secured to the bottom of the typewriting machine by said screws, which also of course hold the rubber feet up against the under side of the side portions of said bottom plate, the plate being rigidly secured to the machine by the screws. The sides 33 of the shell or case may be opened to the position seen at Figure 3, and the cover 40 may also be swung back around the hinge 41. The screws 92 may be taken out, also

the tie-rods 91, and the front plate 36 may be taken from the casing. The remaining three sides of the casing may then be assembled upon the typewriter, and the front plate 36, rods 91 and screws 92 replaced. The base-bars 100 rest upon the mat 28. The bottom plate 94 fits closely between the side plates 33 and extends forwardly against the front plate members or legs 98 (Figure 6), whereby the typewriting machine is accurately located in lateral directions within the casing, so that the carriage-controlling handle connection 73 runs in a true path with the lug 74, on the carriage, and does not become uncoupled from the carriage.

Variations may be restored 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 casing for a typewriting machine having keys, a frame and a platen-carriage traveling on the frame, said casing comprising a body embracing said frame and from which the keys project, said body having open ends through which the carriage may project as it travels beyond the frame, and chambers into which the carriage may run, said chambers extending laterally from said ends and being collapsible.

2. A casing for a typewriting machine having keys, a frame and a carriage traveling on the frame, said casing comprising a body embracing said frame and from which the keys project, said body having hinged ends comprising openings through which the carriage may project as it travels beyond the frame, and an extensible carriage-receiving chamber upon each end to close the opening therein.

3. A casing for a typewriting machine having keys, a frame and a carriage traveling on the frame, said casing comprising a body embracing said frame and from which the keys project, said body having ends comprising openings through which the carriage may project as it travels beyond the frame, a bellows covering at each end of the casing, a hinged wall of the casing on which the bellows is mounted, and a guide for the bellows mounted upon the hinged wall to swing on the hinge with the bellows.

4. A casing for a typewriting machine having keys, a frame and a carriage traveling on the frame, said casing comprising a body embracing said frame and from which the keys project, said body having hinged ends comprising openings through which the carriage may project as it travels beyond the frame, a bellows covering mounted upon each of said ends, a guide for the bellows mounted upon each hinged end to swing on the hinge with the bellows, a hinged front for the casing, and a connection between the hinged front and the hinged ends whereby lifting the front swings the bellows on the hinged ends.

5. A casing for a typewriting machine having keys, a frame and a carriage traveling on the frame, said casing comprising a body embracing said frame and from which the keys project, said body having ends comprising openings through which the carriage may project as it travels beyond the frame, a bellows for each end, a bellows frame for each bellows hinged at the bottom, a front cover hinged part-way down the back, arms upon the back of said cover, an arm upon each bellows frame, a bell-crank connected to each bellows frame arm, and a link connecting each cover arm to its bell-crank.

6. The combination with a typewriting machine having a carriage, of a sound-deadening casing for said machine, said casing comprising a central body-portion whose width about equals the length of the carriage, and also comprising overhanging end-portions projecting therefrom to accommodate the travel of the carriage, and having a slot having about the same length as the travel of the carriage and extending along said central body-portion and terminating between said projecting portions, and a handle projecting through said slot for returning said carriage and effecting line-spacing, said handle being connected with said carriage, so as to travel to the same extent as the carriage and so as to be positioned substantially opposite the middle thereof, whereby said handle is given clearance in said slot, for accommodating the travel of the carriage.

7. A casing for a typewriting machine having keys, a frame and a carriage traveling on the frame, said casing comprising a front through which said keys project, a back and laterally movable ends arranged to accommodate the travel of the carriage, and means, including a cover hinged to said back and connected to said ends, for opening the top of the casing and moving the ends laterally away from the typewriting machine, to give free access to the carriage, by swinging the cover on its hinge.

8. A typewriting machine comprising a carriage having a line-spacing and carriage-returning mechanism, and a sound-deadening casing in which the typewriting machine is confined, said line-spacing and carriage-returning mechanism comprising a handle attached to the carriage to travel therewith, and said casing having a slot through which said handle projects from the interior of the casing, and means to seal up said slot against escape of sound while permitting free travel of the carriage-handle therealong.

9. A casing for a front-strike typewriting machine having keys, a frame, a carriage traveling on the frame, a line-space lever on the carriage, said casing comprising a front plate, a back plate, spacing devices supporting said plates, a cover hinged to said back plate, a slide on said cover adapted to operate the line-space lever, closed means to accommodate the carriage ends during the travel of the carriage, a handle on said slide for operating it, and means on said slide projecting through a slot in the cover to operatively engage a second slide mounted on the carriage and connected to the line-space lever, to enable the handle to operate the lever.

10. The combination with a typewriting machine comprising a carriage having a line-spacing and carriage-returning mechanism comprising a handle connected with the carriage to travel therewith, of a sound-deadening casing, in which the typewriting machine is confined, having a slot through which said handle projects from the interior of the casing, said slot being of substantially the length of the carriage travel, and sound-sealing means to close up said slot while permitting the travel of the carriage-handle therealong, said sound-sealing means formed of flexible material and accommodating itself to the traveling movement of the handle.

11. A casing for a front-strike typewriting machine having keys, a frame, a carriage traveling on the frame, a line-space lever on the carriage, and a slide on said carriage connected with said line-space lever, said casing comprising a cover, a front transparent section in the cover, a rear transparent section in the cover, a slide running on the cover between said sections, and projecting through a slot in the cover, and a fork on the second-mentioned slide to engage the first-mentioned slide.

12. A casing for a front-strike typewriting machine having keys, a frame, a platen-carriage traveling on the frame, said casing comprising a front plate, a rear plate, an extensible chamber at each end, an end plate at each end on which the corresponding chamber is mounted, so that each chamber permits the full travel of the carriage in the corresponding direction, each end plate comprising a solid section covering a large part of the space below the platen, and a hinge for each end plate at the bottom of the casing.

13. A casing for a front-strike typewriting machine having keys, a frame, a carriage traveling on the frame, said casing comprising a front plate, a back plate, end plates hinged to swing away from said plates, said end plates having chambers to accommodate the carriage travel, a cover hinged to the back plate and adapted to come down between the end plates, and catches on said cover adapted to hold the end plates in upright position.

14. A casing for a front-strike typewriting machine having keys, a frame, a carriage traveling on the frame, said casing comprising a front plate, a back plate, end plates hinged to swing away from said plates, said end plates having chambers to accommodate the carriage travel, a cover hinged to the back plate and adapted to come down between the end plates, catches on said cover adapted to hold the end plates in upright position, and connections whereby the cover swings the end plates in and out as it shuts and opens.

15. A casing for a front-strike typewriting machine having keys, a frame, a carriage traveling on the frame, said casing comprising a front plate above the keys, a back plate, a bottom plate adapted to fit the legs of the typewriting machine frame, a bar fast to said bottom plate, devices for holding the front and back plates to the bar, hinges on the bar, and end plates swingable on the hinges, said end plates having chambers to accommodate the carriage travel.

16. The combination with a typewriting machine having a traveling carriage, of a casing comprising a central portion to contain the machine when the carriage is in substantially central position, and extensible side portions to accommodate the carriage when moved in either direction from its central position.

17. The combination with a typewriting machine having a traveling carriage, of a casing comprising a central portion to contain the machine when the carriage is in substantially central position, extensible side portions to accommodate the carriage when moved in either direction from its central position, and a device yieldably urging each of said extensible portions to contracted condition, said device being of such strength as to be readily overcome by the carriage.

18. A typewriting machine confined by the walls and top of a sound-proof casing, and comprising a keyboard-containing base-portion extending forwardly through an opening in the front of said casing, said keyboard comprising keys mounted on key-levers, a guide-comb for said key-levers, a mat of sound-absorbing material under the key-levers, and a sound-absorbing baffle or partition rising from said mat and extending to said guide-comb, and co-operative therewith to reduce or prevent escape of noise through said front opening in said casing.

19. A sound-deadening casing for a typewriting machine, having a traveling carriage comprising an open-ended body portion to contain the typewriting machine when the carriage is in central position, end portions to receive the carriage when shifted

from its central position and to close the ends of said body portion, and means to pivotally support said end portions to enable them to be shifted from effective to ineffective positions and vice versa.

20. A sound-deadening casing for a typewriting machine, having a traveling carriage, comprising an open-ended body portion to contain the machine when the carriage is in central position, said body portion including a top movable to and from effective positions, shiftable end portions to receive the carriage when shifted from its central position and to close the ends of said body portion, and means whereby said top when moved to position to close the upper part of the casing will lock the end portions in closed positions.

21. A sound-deadening casing for a typewriting machine, having a traveling carriage, comprising an open-ended body portion having a shiftable cover, pivoted end portions to receive the carriage when shifted from its central position and to close the ends of said body portion, and means for latching said end portions in closed relation, said latching means being rendered inaffective by shifting the cover to open the top of said body portion.

22. The combination with a typewriting machine having a carriage, of a sound-deadening casing for said machine, said casing including a central body-portion and overhanging end-portions projecting therefrom to accommodate the travel of the carriage, and also including a movable cover-portion, said casing having a slot extending parallel to the direction of carriage travel, a handle projecting through said slot to the exterior of said cover for returning said carriage and effecting line-spacing movements, and sound-arresting means formed of flexible material and extending along said slot, to close up the same against escape of sound while permitting the handle to travel freely.

23. The combination with a sound-deadening casing for a typewriting machine, said casing having an opening through which the keyboard of the typewriting machine projects and comprising a hinged top and ends, of means whereby the opening of the hinged top will cause the ends to be swung away from the machine.

24. In combination, a typewriting machine comprising a forwardly-extending portion containing a keyboard, said keyboard comprising keys mounted on key-levers, a guide-comb for said key-levers, a sound-arresting floor under the key-levers, a sound-arresting partition or baffle rising from said floor and in engagement with said guide-comb, and a sound-deadening casing enclosing said typewriting machine and having a lower front opening through which the keyboard-containing portion of the typewriting machine extends, the upper part of said guide-comb closely engaging the casing above said lower front opening when the typewriting machine is properly positioned in the casing.

25. In combination, a typewriting machine comprising a forwardly-extending portion containing a keyboard, said keyboard comprising keys mounted on key-levers, a guide-comb for said key-levers, a sound-arresting floor under the key-levers, a sound-arresting partition or baffle rising from said floor and in engagement with said guide-comb, and a carriage, a sound-deadening casing enclosing said typewriting machine and having a lower front opening through which the keyboard-containing portion of the typewriting machine extends, said casing comprising a body-portion, a cover and end-portions to accommodate the ends of the carriage when moved from a central position, said end-portions closely engaging the side edges of said floor.

26. A typewriting machine confined in a sound-deadening casing, comprising a frame supported by removable feet and having a keyboard-containing portion extending forwardly through an opening in the front of the casing, the keyboard comprising keys mounted on key-levers, a guide-comb for said key-levers, and a sound-arresting partition or baffle under the key-levers in proximity to said guide-comb to reduce or prevent escape of noise through said front opening in the casing, said baffle being placed against the base of said frame and held thereon by said feet.

27. A typewriting machine confined in a sound-deadening casing, comprising a frame supported by removable feet and having a keyboard-containing portion extending forwardly through an opening in the front of the casing, the keyboard comprising keys mounted on key-levers, a guide-comb for said key-levers, and a sound-arresting partition or baffle under the key-levers in proximity to said guide-comb to reduce or prevent escape of noise through said front opening in the casing, said baffle being placed against the base of said frame and held thereon by said feet, said baffle being in the form of a pan to give suitable clearance beneath said key-levers.

28. The combination with a typewriting machine, having a letter-spacing carriage, of a noise-deadening casing for the noise-producing portion of said machine, said casing comprising a central portion and extensible end portions to permit the carriage to travel to either side of its central position, said central portion having a slot extending therealong adjacent said carriage and parallel to the path of the latter, and a carriage-return device comprising a member extending through said slot, a connection between said member and the carriage, whereby said

member is substantially opposite the middle of the carriage irrespective of the position of the latter, and a finger-piece outside of said casing connected with said member to actuate the same and thereby shift the carriage.

29. The combination with a typewriting machine, having a letter-spacing carriage, of a noise-deadening casing for the noise-producing portion of said machine, said casing comprising a central portion and projecting end portions to permit the carriage to travel to either side of its central position, said central portion having a slot extending therealong adjacent said carriage and parallel to the path of the latter, a carriage-return device comprising a member extending through said slot, a connection between said member and the carriage such that said member is maintained substantially opposite the middle of the carriage, and a finger-piece outside of said casing connected with said member to actuate the same and thereby shift the carriage, and closure means whereby said casing will be kept closed along said slot irrespective of the position of said carriage-return device.

30. The combination with a typewriting machine, having a letter-spacing carriage, of a noise-deadening casing for the noise-producing portion of said machine, said casing comprising a central portion and projecting end portions to permit the carriage to travel to either side of its central position, said central portion having a slot extending therealong adjacent said carriage and parallel to the path of the latter, a carriage-return device comprising a member extending through said slot, a connection between said member and the carriage, and a finger-piece outside of said casing connected with said member to actuate the same and thereby shift the carriage, and closure means for said slot comprising a flexible strip of sound-deadening material having its ends attached to said member adjacent said slot and passing around guiding devices at the ends of the slot.

31. The combination with a typewriting machine, having a letter-spacing carriage, of a noise-deadening casing for the noise-producing portion of said machine, said casing comprising a central portion and projecting end portions to permit the carriage to travel to either side of its central position, said central portion having a slot extending therealong adjacent said carriage and parallel to the path of the latter, a carriage-return device comprising a member extending through said slot, a connection between said member and the carriage, and a finger-piece outside of said casing connected with said member to actuate the same and thereby shift the carriage, and closure means for said slot comprising flexible strips of sound-deadening material having ends thereof attached to said member on opposite sides thereof, and extending along said slot in opposite directions, and means whereby, upon movement of the finger-piece in either direction, an additional length of the strip on one side of the finger-piece will be supplied and the strip on the other side will be taken up, in accordance with the varying lengths of the portions of the slot on opposite sides of said member.

32. The combination with a typewriting machine, having a letter-spacing carriage and a line-space and carriage-return lever therefor, of a noise-deadening casing for the noise-producing portion of said machine, said casing comprising a central portion and projecting end portions to permit the carriage to travel to either side of its central position, said central portion having a slot extending therealong adjacent said carriage and parallel to the path of the latter, a member extending through said slot, a connection between said member and said line-space and carriage-return lever such that said member is substantially opposite the middle of the carriage irrespective of the position of the latter, and a finger-piece outside of said casing connected with said member to actuate the same and thereby operate said lever.

33. A sound-deadening casing for a typewriting machine, comprising a main section to receive the machine when the carriage is in central position, auxiliary sections mounted on said main section to receive the ends of the carriage when moved from its central position, and means to hold said auxiliary sections in closed position on the main section, said means being releasable to enable the auxiliary sections to be shifted from their closed positions.

34. The combination with a typewriting machine having a carriage, of a sound-deadening casing for said machine, an operating device on said carriage, said casing having a slot parallel with the run of the carriage, through which said operating device extends, and means traveling with said operating device to close up said slot against the escape of sound therethrough.

35. The combination with a typewriting machine having feet, of a sound-proof casing therefor having a slot and also comprising a sound-baffling portion to meet a portion of the typewriting machine, to prevent local escape of sound, said machine comprising a carriage, and a carriage-operating handle projecting through said slot, said casing having means engaging said feet to locate the typewriting machine, insuring the close meeting of said sound-baffling portion, and insuring accurate location of said typewriting machine relatively to said slot.

36. The combination with an element com-

prising a typewriting machine, of a sound-deadening element comprising a casing for said typewriting machine and also comprising a bottom or floor portion under the typewriting machine, the typewriting machine having a front keyboard portion projecting from the casing and having key-levers, and also having a front downwardly-extending guide-comb for said levers, and a noise-confining baffle or partition rising from said floor portion to meet said comb.

37. In combination, an element comprising a typewriting machine having machine-locating feet and provided with a carriage, an operating handle for said carriage, and a sound-deadening element comprising a casing for said typewriting machine, said casing having a slot for said handle, and said casing also comprising a floor of sound-deadening material, said floor secured to the remainder of the casing, and locating means confining said feet upon said floor in a predetermined lateral position and locating the typewriting machine accurately within said casing relatively to said slot.

38. The combination with the frame of a typewriting machine, of a sound-muffling pad underlying the same, and means adjustably connected to the frame and engaging the pad to force the same into firm contact with the edges of the frame between the corners thereof, thus closing the bottom of the frame.

39. A sound-absorbing pad for typewriting machines, comprising a frame of substantially the contour of the machine base, a sound-absorbing mat therein, feet of elastic material carried by the frame, and means for attaching the feet to the frame and for attaching the pad to the machine.

40. The combination of a typewriting machine and a frame adapted to be secured thereunder and extending between the corners thereof, a mat associated with one side of the frame for absorbing sounds created in the operation of the machine, and a plurality of rubber feet associated with the other side of the frame for cushioning the typewriting machine.

41. The combination with the base of a typewriting machine, of a sound-muffling pad underlying the same, and extending between the corners thereof, said pad comprising a frame and a mat associated therewith, and means engaging the base to draw the pad into close contact with the edges thereof.

42. The combination with the base of a typewriting machine, of a sound-muffling pad underlying the same, and extending between the corners thereof, said pad comprising a frame, a mat on one side thereof, and rubber feet on the other side thereof, and means engaging the base to hold the feet in place and draw the pad into close contact with the edges of said base.

43. The combination with a typewriting machine, of a sound-muffling pad in the form of a floor under said machine, said floor comprising a layer of sound-muffling material, a layer of stiffening material, and means to secure said layers to said machine.

44. The combination with a typewriting machine, of a sound-muffling pad in the form of a floor under said machine, said floor comprising a layer of sound-muffling material, a layer of stiffening material, and means for both securing said layers and said machine and elastically supporting said machine and said layers upon a desk or table.

45. The combination with a typewriting machine, of a sound-muffling pad in the form of a floor under said machine, said floor comprising a layer of sound-muffling material, a layer of stiffening material, and means for elastically supporting said machine and said layers upon a desk or table; said machine, said layers and said elastic supporting means being all secured together.

46. The combination with a typewriting machine having a paper-carriage, of a noise-confining cabinet in which said typewriting machine is contained, said cabinet comprising a top having a runway or slot extending longitudinally thereof, and a carriage-controlling handle device connected at its lower end to the carriage and extending up through said runway, said top also having an inclined window in front of said runway and also comprising in rear of said runway a rear chamber above the carriage to accommodate portions of work-sheets extending upwardly and backwardly from the carriage.

47. A sound-deadening casing for a typewriting machine having a framework and a carriage, said casing comprising a central portion with carriage-accommodating openings in the sides thereof, and automatically collapsible bellows portions covering said openings and expansible by the carriage as the carriage is moved from its central position.

48. A combined typewriting machine and sound-proof casing fastened thereon, said typewriting machine having a keyboard projecting from said casing and including a carriage, and said casing including a chamber of dimensions to accommodate the travel of said carriage, said chamber being collapsible to bring it into compact relation with said typewriting machine.

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