No. 849,862 PATENTED APR. 9, 1907.

L. J. SIMS.

LIGHT REFLECTING ATTACHMENT FOR TYPE-WRITERS.

APPLICATION FILED MAR. 20, 1906.

Fig. 1.

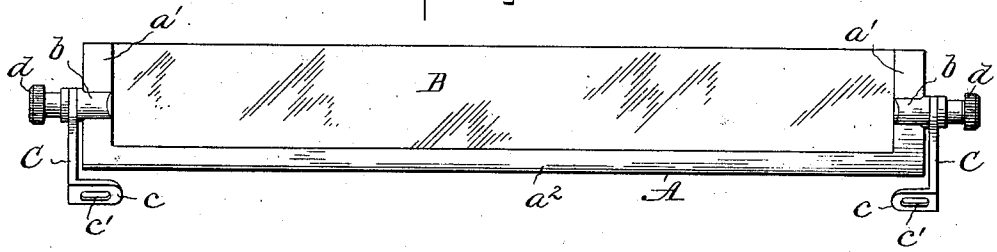
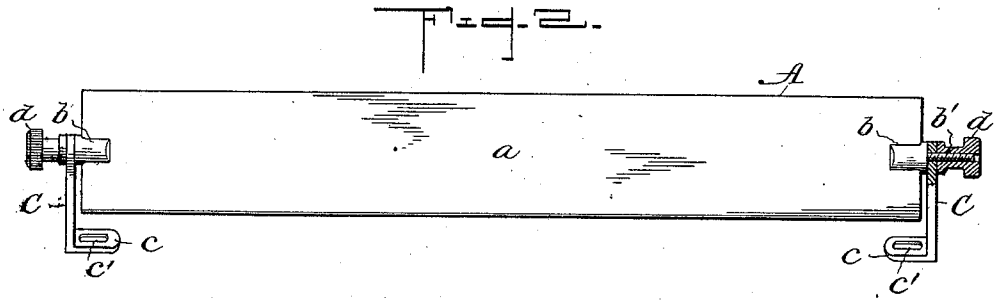


Fig. 2.



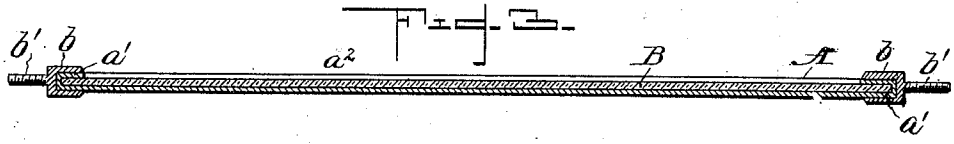


Fig. 4.

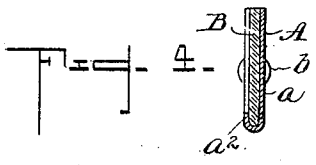
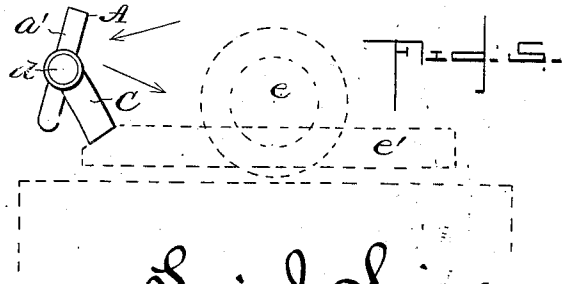


Fig. 5.



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UNITED STATES PATENT OFFICE.

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LIGHT-REFLECTING ATTACHMENT FOR TYPE-WRITERS.

No. 849,562. Specification of Letters Patent. Patented April 9, 1907

Application filed March 20, 1906. Serial No. 307,045.

To all whom it may concern:

Be it known that I, LEWIS J. SIMS, a citizen of the United States of America, residing at Lincoln, in the county of Logan and State of Illinois, have invented a Light-Reflecting Attachment for Type-Writers, of which the following is a specification.

This invention relates to type-writing machines, and has reference more particularly to the provision of an attachment especially adapted for use in connection with such type-writing machines as are operated in a dimly-lighted room.

The primary object of the invention is to provide a light-reflecting medium easily and conveniently attached to any of the type-writing machines now in common use and so located and arranged that light from a certain direction may be reflected onto the platen-roll of the machine in order that the printing may be more clearly seen by the operator though the machine itself is in a dimly-lighted place.

With this principal object in view the invention consists, primarily, of a reflecting medium—for instance, a mirror—in connection with means for attaching the same to a type-writing machine and for adjusting the mirror with respect to the source of light and the platen-roll.

The following specification enters into a detail description of the construction, application, and practical advantages of the invention, and what I claim as new, and desire to protect by Letters Patent of the United States, is more specifically set forth in the appended claim.

In the accompanying drawings, which form a part hereof, Figure 1 is a front elevation of the device. Fig. 2 is a rear elevation of the same. Fig. 3 is a longitudinal sectional view through the mirror-frame and mirror carried thereby. Fig. 4 is a transverse sectional view through Fig. 3. Fig. 5 is an end elevation illustrating the application of the invention.

Like letters and numerals of reference indicate like parts in all the figures of the drawings.

In the operation of a type-writing machine in a dimly-lighted room it is frequently the case that though the operating-keys may be clearly seen by the operator yet the printed matter cannot be so easily read, owing to the insufficiency of the light and the location of the platen-roll within the machine. In such instances the operator is required to strain his eyes to a more or less extent in an effort to follow the printing, especially in that class of type-writing machines commonly known as "visible" writers. It is the purpose of my invention, therefore, to relieve this condition by the provision of a simple and effective device which can be readily and conveniently attached to any of the ordinary type-writing machines.

In carrying out my invention I employ a rectangular frame A, which is preferably made of sheet metal to comprise the back *a*, end pockets *a'* *a'*, and bottom pocket a^2, said pockets being formed by simply bending the ends and lower portion of the plate upon itself, as shown in Figs. 3 and 4. This frame is adapted to hold a light-reflecting medium—for instance, an ordinary mirror B, and so that the greater part of the face of said mirror will be exposed, as illustrated in Fig. 1.

C C designate angle-brackets by means of which the mirror and its frame are attached to the type-writing machine, and for the purpose of supporting the mirror-frame in swinging engagement with the brackets said frame is provided at each end centrally with a boss *b*, having a threaded pin *b'*, the latter passing through an eye in the upper end of the bracket to receive an ordinary milled thumb-nut *d*. The thumb-nut is adapted to bind upon the bracket, so as to firmly hold the mirror-frame at any position to which it may be tilted or adjusted. The lower end of each bracket is provided with a foot-piece *c*, having a slot *c'* therein, by means of which the device may be secured upon a type-writing machine. It will be understood, of course, that in some instances it may be necessary to change the shape of the brackets in applying the device to different machines, and, in fact, the mirror or reflecting medium may be supported in any suitable manner. I also contemplate providing a highly-polished metal plate as a reflecting medium in place of the ordinary glass mirror, inasmuch as it is more durable and less expensive.

In the application of the device to a type-writing machine it is in some instances secured to the carriage *e'*, Fig. 5, by means of the screws which hold the usual scale-plate in place, the slots *c'* in the foot-pieces of the brackets being provided for this purpose. In other cases it is secured to the main frame or other part of the machine. The brackets project forwardly and upwardly from the

carriage or frame and support the mirror in front of the platen-roll *e* above the center thereof and so that the mirror may be adjusted to reflect the light coming from in the rear of the machine onto the lower part of the front of the platen-roll, as indicated by the arrows in Fig. 5. Of course the inclination of the mirror can be readily adjusted to throw the light at the proper point by simply manipulating the milled thumb-nuts *d*. It will be seen, therefore, that by the use of this device the printing which is in the shadow of the machine or roll will be lighted up by reflection, permitting the operator to clearly read the printing without straining his eyes.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination with a type-writing machine, of a device for reflecting rays of light onto the platen-roll of the machine and comprising a rectangular plate bent upon itself at three of its edges forming shallow grooves or pockets, threaded pins projecting from the opposite side edges of the plate, a mirror in slidable engagement with the plate and adapted to take into the grooves thereof, brackets having apertures to receive the pins, said brackets being provided with slotted foot-pieces for adjustable attachment to the type-writer, and thumb-nuts threaded on the pins of the mirror-frame to frictionally engage the brackets, as herein shown and described.

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

LEWIS J. SIMS.

Witnesses:
J. E. JEWETT,
URI KISSINGER.