

No. 687,828.

Patented Dec. 3, 1901.

M. R. HOUSTON.
PROTECTOR FOR TYPE WRITERS.

(Application filed June 10, 1901.)

(No Model.)

Fig. 1.

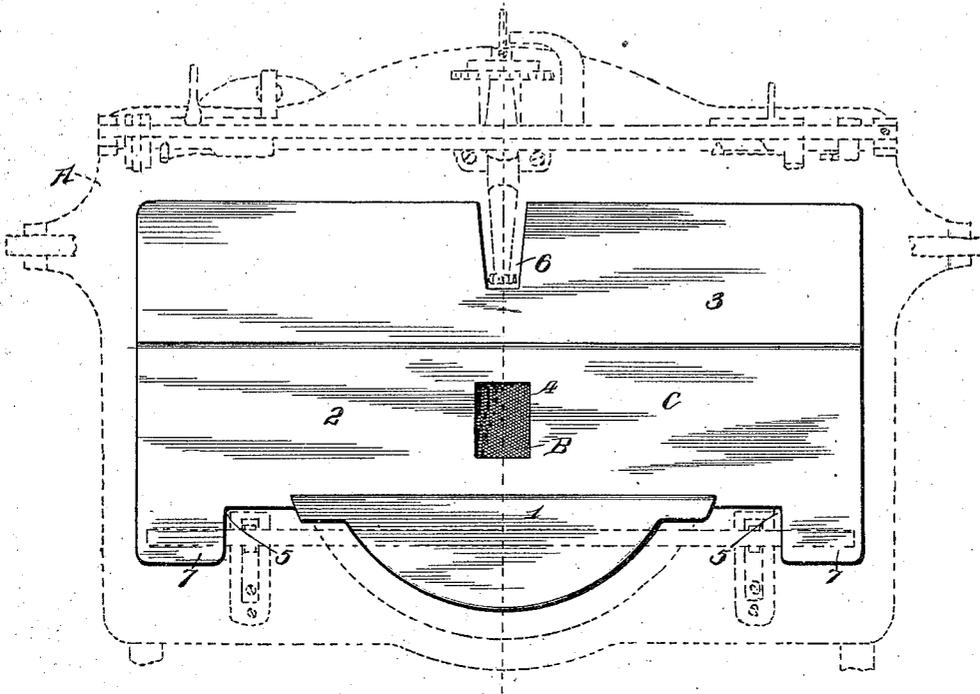
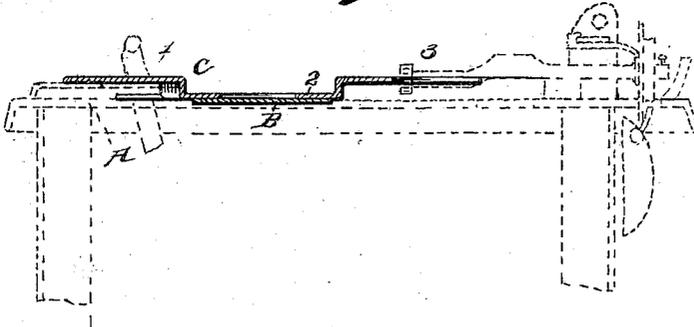


Fig. 2.



Witnesses

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PROTECTOR FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 687,828, dated December 3, 1901.

Application filed June 10, 1901. Serial No. 63,928. (No model.)

To all whom it may concern:

Be it known that I, MAMIE R. HOUSTON, a citizen of the United States, residing at Nevada, in the county of Vernon and State of Missouri, have invented certain new and useful Improvements in Protectors for Type-Writers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to type-writing machines, and has for its object to provide a simple and efficient protective plate for the working parts which will, in conjunction with parts of the machine proper, form a complete and practically imperforate cover for the mechanism within the type-dome.

The greatest difficulty experienced in keeping a type-writer clean and in working order arises from the constant accumulation of particles of rubber and paper upon the metallic members and in their bearings, due to erasures of the writing while the work is in the machine. Not only does this accumulation clog the bearings and make frequent cleanings thereof necessary, but its effect upon the metal itself is deleterious, the rubber particles adhering tenaciously thereto, so as to be very difficult of removal and in a short time causing corrosion of the metal. This corrosive action affects not only the bearings, but the bars and links as well, and in order to efficiently prevent harm to the machine from frequent use of the eraser it is therefore necessary to completely cover that portion of the machine containing the type and type-levers into which the dust may fall or be blown when the eraser is used.

To this end my invention consists of a thin plate of metal or other material shaped to conform to the configuration of the top plate of the type-dome and covering substantially the entire framework containing the type-bars. An aperture is provided at the point where the printing impression is made; but this opening is made of the smallest possible size consistent with efficient work, and the ribbon located directly therebeneath closes the aperture and makes the device for purposes of protection practically imperforate.

In the drawings I have illustrated my in-

vention as applied to a "Remington" type-writer and have shown a construction particularly applicable to that type of machine. 55

Figure 1 is a top plan view of my attachment in place upon a machine, the type-writer being but partially indicated. Fig. 2 is a vertical section on line 2 2 of Fig. 1.

In the drawings, A represents the framework of a type-writer-key dome, and B indicates the ribbon. 60

C represents my attachment as a whole.

The protector or plate C is shaped to approximately conform to the outline of the top of the key-dome, having a curved front edge to correspond to the portion of the circular type-bar support which extends beyond the carriage-shift bar, straight sides, and a straight back. 70

In order that the protector-plate may fit closely to the machine, the central zone 2 thereof intermediate the front and rear portions 1 and 3 is depressed, so that when said front and rear portions 1 and 3, respectively, rest upon the raised portions of the type-bar ring the central zone will rest upon the ribbon B and its guide. The depressed zone 2 is provided with a central opening 4 at the point where the type impression is made, such opening being as small as may be found practicable. As shown, the width of the aperture is less than that of the ribbon, so that the opening is kept constantly closed thereby. 80

The protector is also provided with such other recesses or openings as the construction of the particular make of machine on which it is used may require to prevent interference with the working parts. In the present embodiment of the invention the plate is provided with recesses 5 5 in its front edge to receive the carriage-shifting levers and at the middle of the rear edge with a recess 6 to accommodate the wheel of the escapement mechanism. In each instance, however, the opening is made as small as possible and the plate made to fit close to the support. To this end I prefer that the ears 7 7, extending forward exteriorly of the recesses 5 5, shall be in the plane of the central zone 2, that they may lie flat upon the frame of the machine. 95 100

My attachment is placed in position by removing the carriage-shifting rod and sliding the plate into place from the front. When

so inserted, screws, springs, or other holding means may be employed to retain the protector in place, or it may be left without positive holding means, its snug fit with relation
5 to the projecting members which it surrounds retaining it in proper position.

It will be seen that by the construction herein described I provide a protector for the machine which, in connection with parts of
10 the machine, forms a practically imperforate cover for the type and their actuating mechanism from which the dust of erasures may be readily brushed or blown, so as to fall entirely clear of the machine, and thus prevent
15 the destructive effect of dust accumulation hereinbefore referred to.

While I have shown and described my attachment as applied to a "Remington" machine, it will be understood that it is applicable, with but slight modifications in shape
20 and size, to machines of other makes.

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

25 1. The combination, with a type-writer embodying a type-dome and an inking-ribbon arranged to traverse the type-dome in a horizontal plane, of a protector for the type-dome having a central area arranged in close proximity to the ribbon, and provided with an
30 aperture located in vertical alinement therewith, and an extension having a flat, uninterrupted surface in rear of said central area

arranged to take over the top of the type-dome and extend substantially to the rear edge thereof, whereby dust falling upon said protector may be blown across the same from front to rear to fall entirely clear of the machine, substantially as set forth. 35

2. The combination with a type-writer embodying a type-dome, type mechanism arranged therein, and an inking-ribbon traversing the top of the type-dome in a horizontal plane, of a protector for the type-dome superposed thereon and substantially coextensive therewith arranged in close proximity to the ribbon and provided with an aperture of less diameter than the width of the ribbon located in vertical alinement with the impression-point of the type, whereby said aperture is closed by said ribbon, and a substantially imperforate cover for the entire type-dome is provided, substantially as set forth. 40 45 50

3. A protector for type-writers consisting of a plate having a curved front edge, a straight rear edge, a depressed section intermediate said front and rear edges, and an aperture in said depressed section, substantially as described. 55

In testimony whereof I affix my signature 60 in presence of two witnesses.

MAMIE R. HOUSTON.

Witnesses:

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