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TYPE CLEANING ATTACHMENT FOR WRITING MACHINES.

No. 425,387

Patented Apr. 8, 1890.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

WITNESSES:

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TYPE-CLEANING ATTACHMENT FOR WRITING-MACHINES.

Application filed June 11, 1889. Serial No. 313,824. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. NORTHROP, of Charleston, in the county of Charleston and State of South Carolina, have invented a new and improved Type-Cleaning Attachment for Writing-Machines, of which the following is a full, clear, and exact description.

My invention relates to a device providing for quickly and easily cleaning the faces of the types used in writing-machines, and has for its object to provide a simple, inexpensive, and efficient device of this character.

The invention consists in the type-cleaning device, preferably a brush, held to the paper-carryage and adapted for contact with the faces of the type, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a bottom view of the paper-carryage of a "Remington" type-writer swung upward and partly broken away and with my improved type-cleaning device applied there to. Fig. 2 is an end view of the carriage and adjacent parts of the type-writer with the cleaning attachment. Fig. 3 is a detail front sectional view of one end of the paper-carryage and type-cleaning attachment, and Fig. 4 is a top perspective view of the type-cleaning attachment removed from the paper-carryage.

I will particularly describe the invention with reference to the drawings, which illustrates one practical form of the type-cleaning attachment and the manner of holding it detachably to the paper-carryage of a type-writing machine, the one shown in part being the Remington machine; but it will be understood that the improvement is applicable to any type-writer using a traversing or hinged paper-carryage having an impression roller or platen.

Referring more particularly to Fig. 4 of the drawings, it will be seen that in making the type-cleaning attachment, I use a thin metal holder A, which has a main horizontal portion or plate a and upbent end parts a' a', the latter or it may be the whole plate, being somewhat elastic, by preference, to allow the attachment to be readily fitted onto the paper-carryage of the type-writer, as presently explained. The holder-plate a, which is about as long as the paper-carryage, is provided with a pair of dovetail-like flanges or lips b b, which are bent inward to form with the plate a dovetailed recess, into which the back of the type-cleaning brush B fits snugly, and from which the brush may be pushed end-wise to remove it for repairs or renewal, as occasion requires. The ends a' a' of the holder A are provided with outwardly flanges a'' a'', which overlie the top of the paper-carryage frame, while a couple of springs a' a' are punched or pressed out from the metal, underlie the carryage-frame.

In applying the type-cleaning attachment to the paper-carryage C the end parts a' a' of the brush-holder A will be slipped upward from the under side of the carryage and between its end bars c c and the ends of the impression-roller D on the carryage until the flanges a' spring outward above the end bars c of the carryage-frame and the springs a' 75 underlie the end bars. The ends a' of the holder A and their flanges a'' are cut away at the center to fit around the journals of the impression-roller, and thus prevent movement of the attachment A B toward the front or rear of the paper-carryage, while the end lock of the holder with the carryage causes the type-cleaning attachment to travel laterally with the carryage.

It is obvious that as the type-writer bars 85 E are actuated from the keys of the machine the faces of the type e on the bars will be brought in contact with the brush B and will be thoroughly cleaned, and as the keys of the type-writer are pressed down the carryage C will be fed along laterally, as when printing or writing, thus bringing another portion of the brush into position to receive the impact of a type-character each time any key is depressed. When the attachment is used on a machine in which an inking-ribbon is used, the ribbon will be removed or shifted to one side of the point of impression of the type on the brush. The brush will be wide enough to accommodate the characters brought to the point of contact with it, or as wide as the two characters on each type-bar.
of the Remington machine, and thus will also accommodate the single characters on the type-bar of the "caligraph" or the "Yost" writing-machine."

My Invention is manifestly applicable to type-wheel machines as well as type-bar machines, the only requirement being that the brush be made wide enough to accommodate the characters on the type-wheels, which will strike the brush held to the paper-carriage in substantially the manner above described; and in machines where the paper-carriage swings over to the type the type-cleaning device will, when attached to the carriage, as effectively clean the type as when the type are pressed to the brush by bars, levers, or wheels to which they are held.

I am not limited to using a brush as a medium by which to clean the type-faces; but a brush is at present thought to be most practicable, and therefore is preferred. The brush material may consist of bristles or hairs or wires, as may be deemed most suitable for action on the faces of type made of any particular material.

By my improvements I adapt the type-cleaning brush or device to be instantly slipped into or out of supporting connection with the paper-carriage to apply the cleaner to or remove it from the carriage, said type-cleaning brush or device being independent of the impression-roller in order that in applying the type-cleaning brush or device to or removing it from the carriage it will not interfere with the paper which may be in position on the impression-roller or impede the free operation of the impression-roller. Thus it will be seen that while matter is being printed, if it be found that certain of the printing-characters have become blurred and need cleaning, the brush can be instantly applied to the carriage without removal of or interfering with the paper in position, and, further, that while the brush is in position the roller may freely be manipulated.

It will be seen that by making the extremities of the type-cleaning device integral with said device and of springy or elastic material they are adapted to bend or yield so as to lessen the distance in a straight line between them in applying it to and removing it from the paper-carriage of any type-writer with which it may be used.

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

A type-cleaning device for type-writing machines having integral with it springy or yielding supporting-arms, one bent from each of its opposite extremities, said arms constructed to yield toward each other to lessen the distance in a straight line between them in applying the device to or removing it from the paper-carriage, substantially as set forth.

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Witnesses:

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