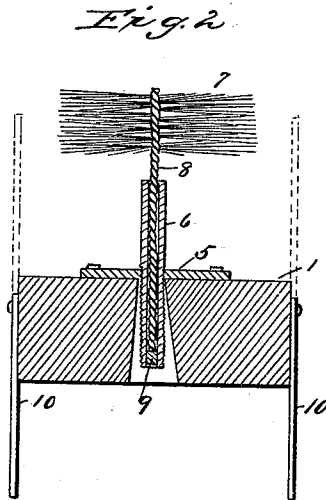
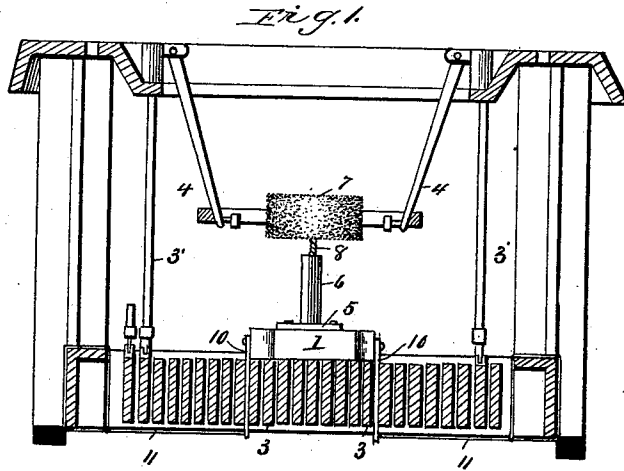


(No Model.)

C. T. THATCHER.  
CLEANING ATTACHMENT FOR TYPE WRITING MACHINES.  
No. 521,900. Patented June 26, 1894.



witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES T. THATCHER, OF ROCHESTER, NEW YORK.

## CLEANING ATTACHMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 521,900, dated June 26, 1894.

Application filed February 14, 1893. Serial No. 462,293. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES T. THATCHER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Cleaning Attachments for Type-Writing Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide an attachment for cleaning the type of type-writing machines, which can readily be adapted to machines already in use without the necessity of any special fitting or adjustment, which will not be liable to get out of order and is cheap and simple in construction, and to these ends it consists in certain improvements in construction and combinations of parts, all as will be hereinafter fully described and the novel features pointed out in the claims at the end of this specification.

In the accompanying drawings: Figure 1 is a sectional view of a portion of a type-writing machine showing the application of my invention thereto; Fig. 2, a sectional view of the device detached.

Similar reference numerals in both the figures indicate similar parts.

The attachment consists generally of a base or block 1 preferably of wood or similar material, adapted to rest upon the key levers 3, 3, of a type-writing machine, such as the Remington or Caligraph, inside of the basket formed by the wires 3 connected with the type-bars 4, which latter may be of any suitable construction. Formed upon, or secured to the upper side of this block or base is a plate 5 having a screw-threaded aperture through which is adapted to pass a tubular standard 6 threaded at its lower end and engaging said nut and capable of vertical adjustment by screwing through it, as will be understood.

7 indicates the cleaning brush composed preferably of bristles secured in a suitable head, or preferably secured to the upper ends of a twisted wire shank or rod 8 extending down in the tube and having its lower end resting on the bottom thereof, formed, in the present instance, by a plug 9. This brush is

capable of a free rotary movement in the tubular standard and its edge is arranged to cut the arc described by the ends of the type-bars 4 during the printing operation, so that the type striking the ends of the bristles will be cleaned by the latter, and the brush may be freely rotated. The long shank or rod gives sufficient lateral bearing in the standard to prevent displacement and insure proper operation, though the brush may be readily removed when desired by simply lifting it out of the standard. The vertical adjustment of the brush may be readily accomplished by screwing the standard up or down in the base piece.

The base or support, as stated, rests upon the key levers 3, 3, and therefore in order to apply the device it is only necessary that it be placed in the basket and as the key levers when operated move downward, the remaining levers upon which it rests will afford a secure bearing. In order, however, to prevent lateral movement of the attachment, I attach to opposite ends of the base, short plates or legs 10 adapted to project down between the key levers, and, if desired, to further secure said base in position, a wire 11 may be passed through apertures in the lower ends of said plates or legs secured to the sides of the frame of the machine, but this means of attachment I do not deem essential, as the weight of the base is sufficient. The plates 10 are preferably pivoted to the base and adapted to be turned for convenience in shipping, but could be made integral with, or rigidly attached to it, if desired.

This form of attachment is very simple and cheap, and though in practice I make the base 1 of wood and secure the nut or threaded plate 5 to it for economy in construction, it is obvious that it could be made entirely of metal if desired, and also that the brush could be connected to the rod 8, otherwise than as shown, but the present embodiment is light, cheap and altogether desirable.

I claim as my invention—

1. A type-cleaning attachment for typewriters consisting of a broad stable base adapted to rest upon and be supported by two or more of the key levers of a type-writer within the type-basket, and a brush freely supported thereon adapted to be engaged by

the type during the printing operation, substantially as described.

2. The combination with the type-bars and key levers of a type-writer, of a type-cleaning attachment consisting of a broad base or support resting upon and supported by the key levers inside of the basket, and a brush freely supported on said base and adapted to be engaged by the type during the printing operation, substantially as described.

3. The combination with the type-bars and key-levers of a type-writer, of a type-cleaning attachment consisting of a broad stable base resting upon and supported by the key levers within the type-basket, the vertically adjustable tubular standard thereon and the circular cleaning brush having the long stem or rod loosely supported in the standard, said brush being arranged in the path described by the type during the printing operation and serving to engage and clean them, substantially as described.

4. The combination with the type-bars and key-levers of a type-writer, of a type cleaning attachment consisting of a base or support resting upon the key-levers inside the basket having the depending legs passing be-

tween the levers, and a brush supported on said base adapted to be engaged by the type during the printing operation, substantially as described.

5. In a type-cleaning attachment for typewriters, the combination with the broad stable base or support adapted to rest upon the key levers within the basket and the adjustable tubular standard thereon, of the cleaning brush composed of bristles secured between twisted wires, said wires extending below the brush and forming a rod loosely supported and rotatable within the tubular standard, substantially as described.

6. In a type-cleaning attachment for typewriters, the combination with the broad stable base or support adapted to rest upon the key levers within the basket, of a tubular standard on the base, a rod loosely supported in said standard, having the brush at its upper end adapted to be engaged by the type during the printing operation, substantially as described.

CHARLES T. THATCHER.

Witnesses:

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