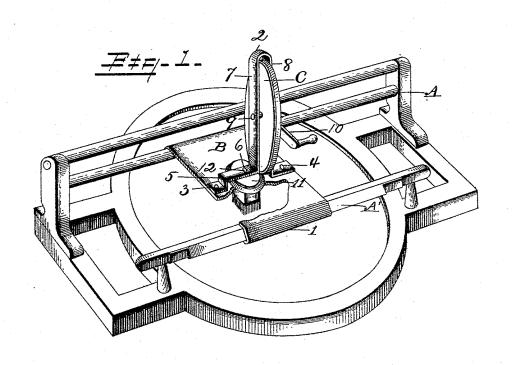
(No Model.)

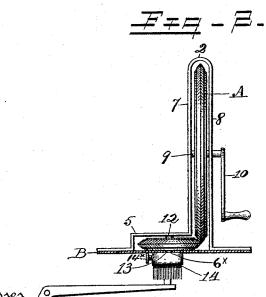
W. W. RUNYON.

CLEANING ATTACHMENT FOR TYPE WRITING MACHINES.

No. 490,310.

Patented Jan. 24, 1893.





Witnesses Jo Albert B. Blackerood G. N. Sommers.

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attorney,

## UNITED STATES PATENT OFFICE.

WILLIAM W. RUNYON, OF CORNING, IOWA.

## CLEANING ATTACHMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 490,310, dated January 24, 1893.

Application filed January 23, 1892. Serial No. 419,026. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. RUNYON, a citizen of the United States of America, residing in Corning, in the county of Adams 5 and State of Iowa, have invented a new and useful Cleaning Attachment for Type-Writing Machines, of which the following is a specification.

My invention consists in a detachable supro port having mounted thereon a rotatable wheel engaging with another wheel on a vertical shaft carrying on the lower end a brush, as will be hereinafter fully described and particularly pointed out in the claim.

In the drawings annexed, Figure 1 is a perspective of the device applied to the carriagebars of a well known type-writing machine. Fig. 2 is a side or edge view in elevation of the device.

My invention is adapted to cleaning the types of any machine wherein the type-bars are supported in a circular carrier, ring, or basket, each type-bar striking at a common point being a central point common to the 25 whole series.

Referring to the drawings, A, A', designate the carriage-bars of a type-writing ma-

B designates the base or supporting plate 30 of the cleaning-device having one end turned down, as at 1, to engage with the front carriage bar of the machine and the other end adapted to rest on the rear carriage-bar, substantially as shown in the drawings.

While I have illustrated the support as described, it may be of any construction suitable to hold the device to the machine with the brush to rotate on a horizontal plane, at a point to engage the types when they are 40 moved upward against the brush by the key-

On the support is mounted a bracket 2, secured thereto at 3, and 4, by rivets or any suitable fastening means. This bracket is 45 struck down to a horizontal direction at 5, and provided with a bearing 6, for the horizontally arranged wheel, and then directed vertically and bent back on itself forming standards as at 7 and 8, a space being formed 50 between the standards 7 and 8 to provide room between them for the driving-wheel or

C designates the driving-wheel having its journal 9, arranged in bearings in the said 55 standards, substantially as shown. The ex-

tended end of the journal 9 is provided with a crank-handle 10, by which the driving-wheel

may be rotated.

The rim of the wheel B is beveled and may have arranged thereon a rubber tire or band 60 to provide increased frictional contact with the small beveled wheel 11. The bevel-wheel 11 is mounted on a vertical arbor or shaft 12, running in the bearing 6 and a lower bearing 6x, in the plate or support, and the bevel 65 edge of the wheel 11 engages with the bevel of the driving wheel. The arbor or shaft 12 is extended downward at 13, and has detachably connected thereto the cleaning-brush 14; a set-screw  $14^{\times}$ , being let through the back of 70 the brush to set with its inner end against the arbor and hold the brush fast to the arbor. The brushes are thus made interchangeable and one may be removed and replaced by a new one when ever desired. The brush 75 may have a stem to fit in a socket in the lower end of the arbor and be held by this means.

The brush is designed to be made with wire or metal bristles.

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It will be perceived from the foregoing description, that the brush is rotated on a horizontal plane on the face of the types and thus contacts and cleans with a boring and twisting motion, reaching the forms in the best di- 85 rection and with the best results.

Having thus described my invention what I claim and desire to secure by Letters Patent

The cleaning device for type-writing ma- 90 chines, comprising the supporting-plate having a bearing formed therein, the bracket consisting of a single piece having the horizontal part 5, and vertical double portions 7, 8, the driving-wheel having a beveled edge, 95 journaled between the vertical parts of the bracket, the horizontally arranged wheel 11 journaled between the horizontal part of the bracket and the supporting plate and having its shaft extended below the supporting-plate, 100 and the brush on the extended portion of the shaft below the plate, as specified.

In witness whereof I have hereto set my hand in the presence of two attesting wit-

nesses.

## WILLIAM W. RUNYON.

Attest:

J. E. CARMICHAEL, E. F. MINER.