

No. 632,298.

Patented Sept. 5, 1899.

M. G. WEST.

TYPE CLEANER FOR TYPE WRITING MACHINES.

(Application filed Mar. 10, 1899.)

(No Model.)

Fig. 1.

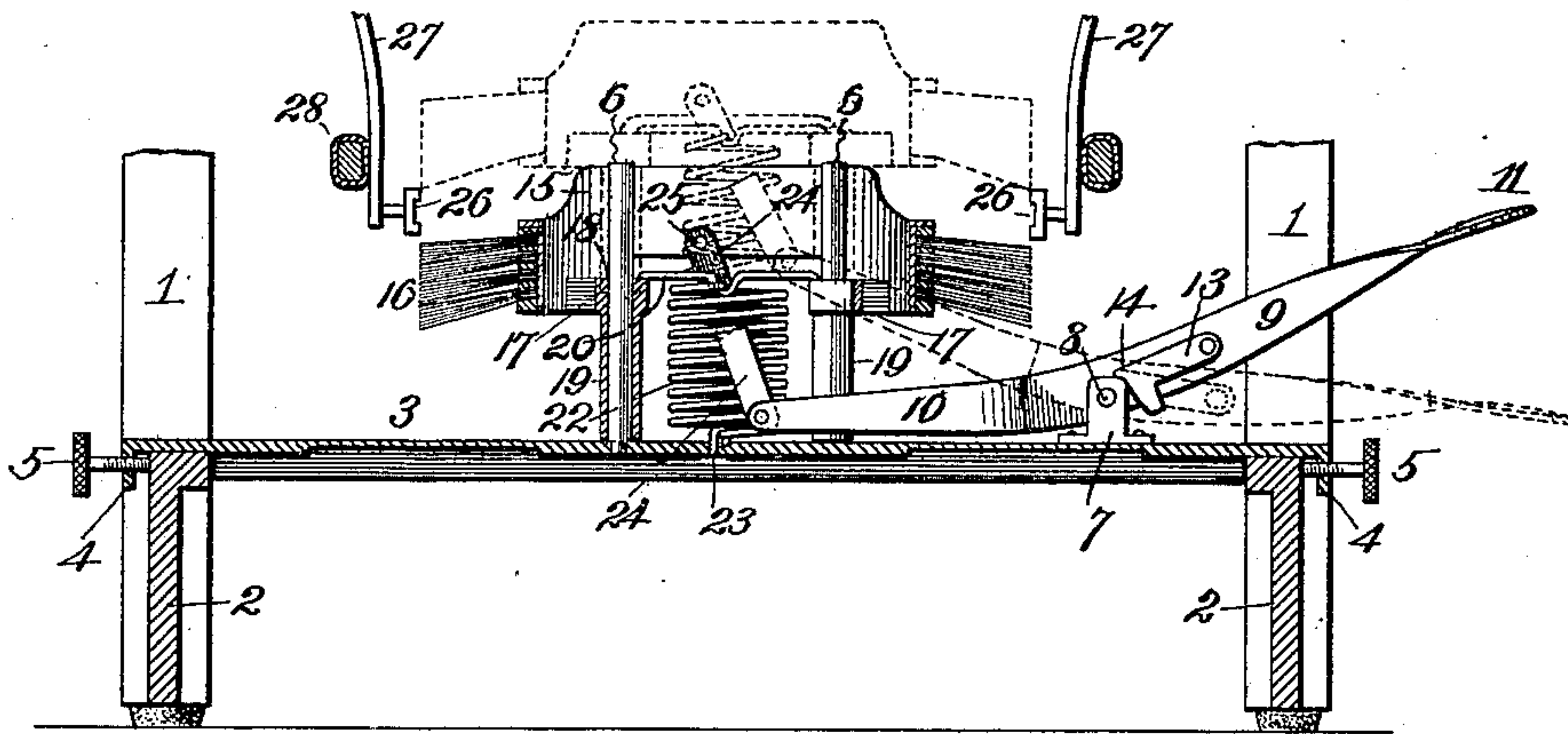


Fig. 2.

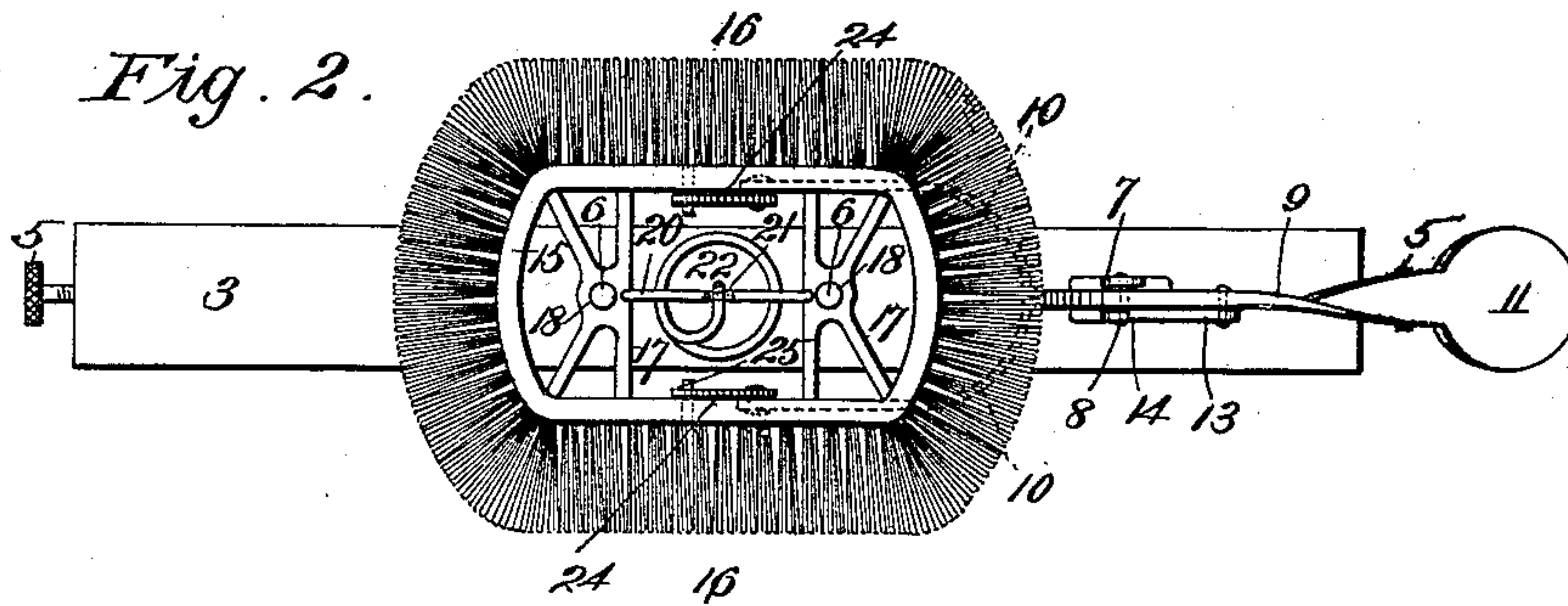


Fig. 3.

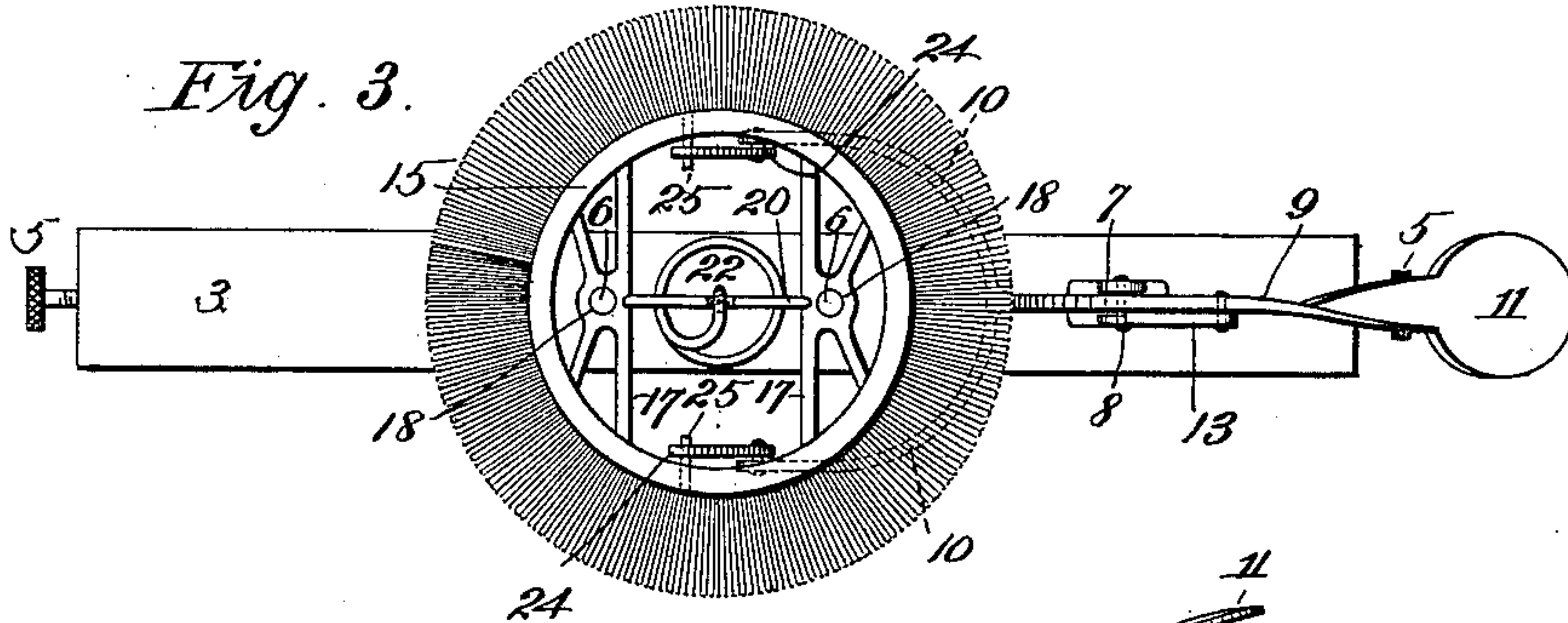
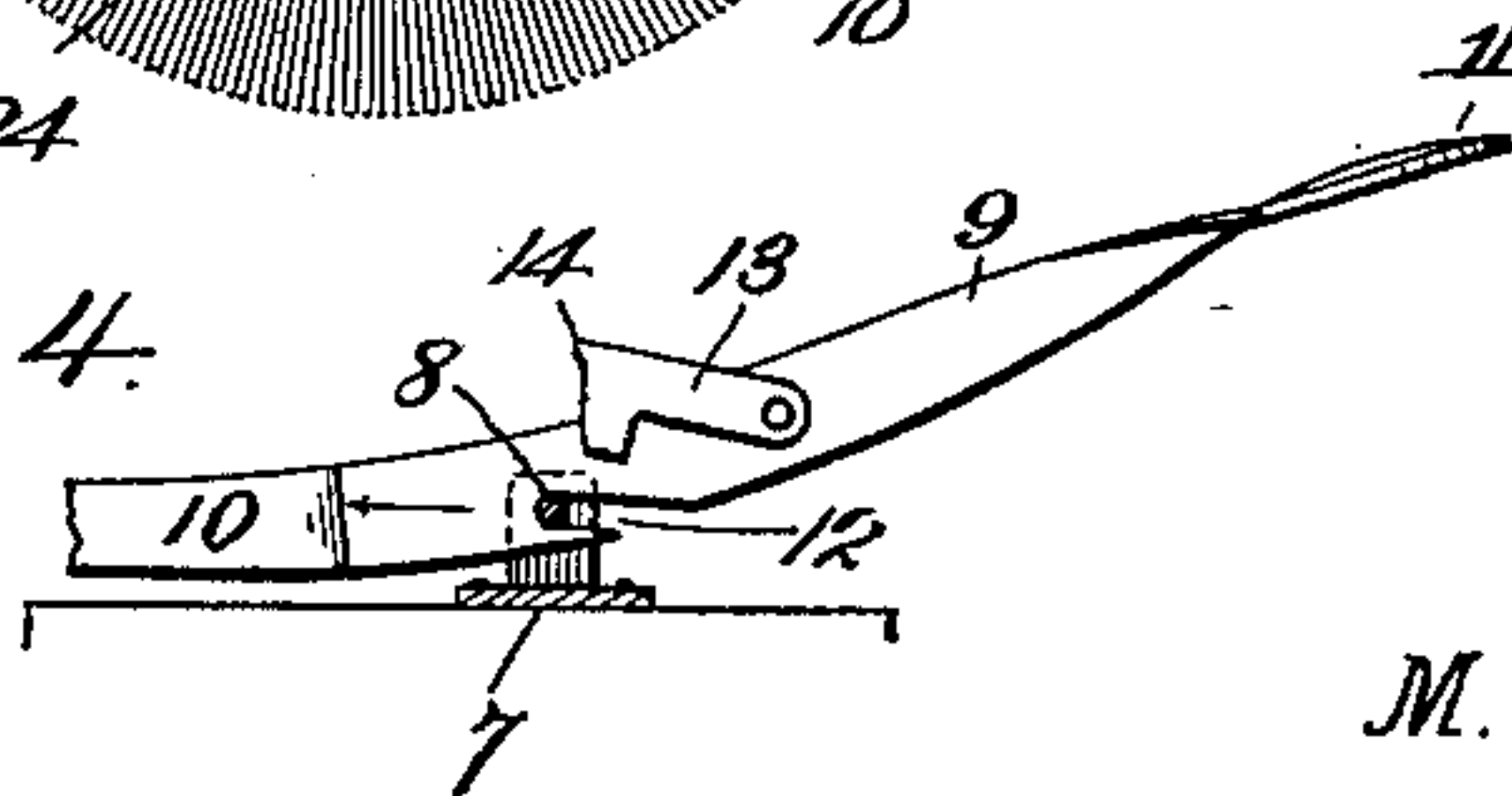


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

MONTGOMERY G. WEST, OF KANSAS CITY, MISSOURI.

TYPE-CLEANER FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 632,298, dated September 5, 1899.

Application filed March 10, 1899. Serial No. 708,562. (No model.)

To all whom it may concern:

Be it known that I, MONTGOMERY G. WEST, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Type-Cleaners for Type-Writing Machines, of which the following is a specification.

My invention relates to type-cleaners for type-writing machines; and my object is to produce a device of this character which is susceptible of use upon a "Remington," as well as upon a "Smith-Premier," "Caligraph," and other machines having the type arranged in a circle.

A further object is to produce a type-cleaner which may be easily and quickly secured to or removed from a type-writing machine and which may remain thereon permanently, if desired, because the cleaner when occupying its operative position in no wise interferes with the operation of the machine.

A still further object is to produce a device of this character of simple, strong, durable, and inexpensive construction.

With these objects in view the invention consists in certain novel and peculiar features of construction and combinations of parts, as will be hereinafter described and claimed, and in order that the invention may be fully understood I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 represents a vertical section taken through the center of the lower part of a type-writing machine and also through the center of my type-cleaner secured to the machine. Fig. 2 is a top plan view of the type-cleaner detached, said cleaner being adapted for use upon a Remington. Fig. 3 is a similar view of a type-cleaner having a circular instead of an elongated brush, this cleaner being adapted for use with type-writing machines having circular type series. Fig. 4 is a detail view of part of the type-cleaner.

In the said drawings, 1 designates the rear standards of a type-writing machine, and 2 the sides of the base of the machine.

The type-cleaner proper is constructed as follows: 3 designates a bar which bridges the space between and rests upon the sides 2 of the machine-frame, and said bar is provided at its ends with depending arms 4, carry-

ing set-screws 5 for engagement with said sides, so as to clamp the bar 3 firmly in position.

By making the bar 3 long enough to accommodate the widest machines and mounting set-screws in the depending flanges thereof it is obvious that the bar can be operatively secured as easily upon the narrowest machines or intermediate sizes as upon the widest machines.

6 designates a pair of vertical rods which are arranged preferably at equal distances from and at opposite sides of the center of the bar and are secured to the latter in any suitable or preferred manner, their upper ends attaining an altitude slightly higher by preference, than the series of type, and secured also upon said bar is a bearing-standard 7, preferably bifurcated and carrying a cross-pin or pivot 8.

9 designates a lever which at its front end is forked to provide the branch arms 10 and at its opposite end is formed with a thumb or finger plate 11 in order that the operator may conveniently manipulate the lever, which is pivoted upon the cross-pin or pivot 8. For convenience in securing the cleaner in position or removing the same this pivotal relation can be broken or established at will, because the lever is provided in its under side with a slot or notch 12, through which the pivot-pin 8 extends instead of through a perforation in the body of the lever. This slot or notch opens rearward of the pivot, and the latter is reliably maintained therein when the parts are operatively assembled by means of the catch 13, pivoted to the lever and adapted, when the latter is mounted upon the pivot, to swing downward and, overlapping the slot, bear forwardly against the standard 7, said catch being provided at its upper edge with a shoulder 14 to overlap the top of the standard, and thus limit such downward movement. When the catch is thus arranged, it is obvious that the lever cannot work forward upon the pivot and be disconnected therefrom.

15 designates an annular frame which approximately conforms to the arrangement of the top of the particular machine upon which the cleaner is destined for use—that is to say, if the cleaner is for use upon a Reming-

ton, wherein the type are arranged in substantially an elongated rectangular series, the frame will preferably be of elongated rectangular form, (see Fig. 2,) and if the cleaner 5 is for use upon a Smith-Premier or other machine having its type arranged in a circle the frame will, by preference, be of circular form, said frame being simply the body of a correspondingly-formed brush 16, the working face or faces of said brush reaching about the vertical plane of the type.

The frame or body 15 of the brush for the purpose of making it as light and cheap as possible is provided with skeleton cross-bars 15 17, having central holes 18, which register with the vertically-dependingsleeves 19, preferably cast with said cross-bars and of such length that when resting on the bar 3 they support the brush contiguous to but out of the path of the type when the latter respond to pressure on the keys. (Not shown.)

The cross-bars 17 are connected preferably by a bridge-bar 20, having a notch or depression 21 in its upper side, and arranged vertically between said bridge-bar and bar 3 is a retractile coil-spring 22, which is hooked at its lower end to a staple or hook 23, riveted or otherwise secured to the bar 3 at its center, and is hooked at its upper end to the 30 notched portion of the cross-bar 20, the function of said spring being to expedite and make positive the downward movement of the brush immediately after the overcoming pressure upon the thumb-piece 11 of the lever is removed, this pressure being applied by the operator in order to raise the brush and cause it in its upward movement to sweep the face of the type, this sweeping operation being repeated in the opposite direction by the 40 downward movement of the brush caused by said spring. In order to elevate the brush by depressing said lever, the latter is pivotally connected to the lower ends of the links 24, pivotally mounted at their upper ends on the pins 25, projecting inward from the body or frame of the brush.

In the late types of the Remington type-writing machines there exists a space between the two pull-rods nearest each side of 50 the machine wide enough to receive the bar 3 and permit it to rest upon the sides 2 of the machine and be secured in such position, as hereinbefore explained; but in order to conveniently secure said bar in such position the links 24 are detached from the pins 25, and the spring is detached from either the staple or hook 23 of the cross-bar 20 in order that the brush may be disengaged from the guide-rods 6. Assuming now that the parts 55 are detached, as described, and the bar has been secured in position, the operator raises the carriage and the ribbon attachments,

which obstruct the entrance to the type-nest, and introduces therein the brush, slipping the same upon the guide-rods 6. The operator 65 then reestablishes the connection by means of the spring between the bar and the brush-frame and mounts the upper ends of the links upon the pins 25, as before. The catch 13 is also adjusted to its operative position, 70 as shown in Fig. 1. As now arranged it is obvious that the type 26 at the lower ends of the type-bars 27 are free to operate in the usual manner and are braced from outward movement by the customary support 28, 75 which support serves to hold the type rigid against the pressure of the brush when the latter is reciprocated vertically by alternately pressing down upon and releasing said lever to permit the spring to lower the brush in the 80 manner hereinbefore explained.

From the above description it will be apparent that I have produced a type-cleaner for type-writing machines which is adapted for use by simply changing the contour of the 85 brush with any of the type-writing machines in common use, and it is to be understood that slight changes in the detail construction, form, arrangement, or proportion of the parts will not be considered a departure from the 90 spirit and scope or sacrifice any of the advantages of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is— 95

1. A type-cleaner for type-writing machines, comprising a bar secured to the machine, and provided with vertical guides, a brush fitting slidably on said guides, a retractile spring connecting the brush with the 100 bar, a standard upon the bar and provided with a pivot-pin, a lever linked to the brush and fulcrumed on said pivot-pin, and a catch carried by said lever and engaging the standard to hold the lever on said pin, substantially as described. 105

2. A type-cleaner for type-writing machines, comprising a bar secured to the machine and provided with vertical guides, a brush fitting slidably on said guides, a retractile spring connecting the brush with the 110 bar, a standard upon the bar and provided with a pivot-pin, a lever linked to said brush, and provided with a slot 12 pivotally embracing said pivot-pin, a pivoted catch 13 carried 115 by said lever and provided with a shoulder 14, substantially as and for the purpose described.

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

MONTGOMERY G. WEST.

Witnesses:

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HELEN RODGERS.