A. C. BISHOP.

TYPE CLEANER.

APPLICATION FILED FEB. 19, 1909.

955,939. **Patented Apr. 26, 1910.**

2 SHEETS—SHEET 1.

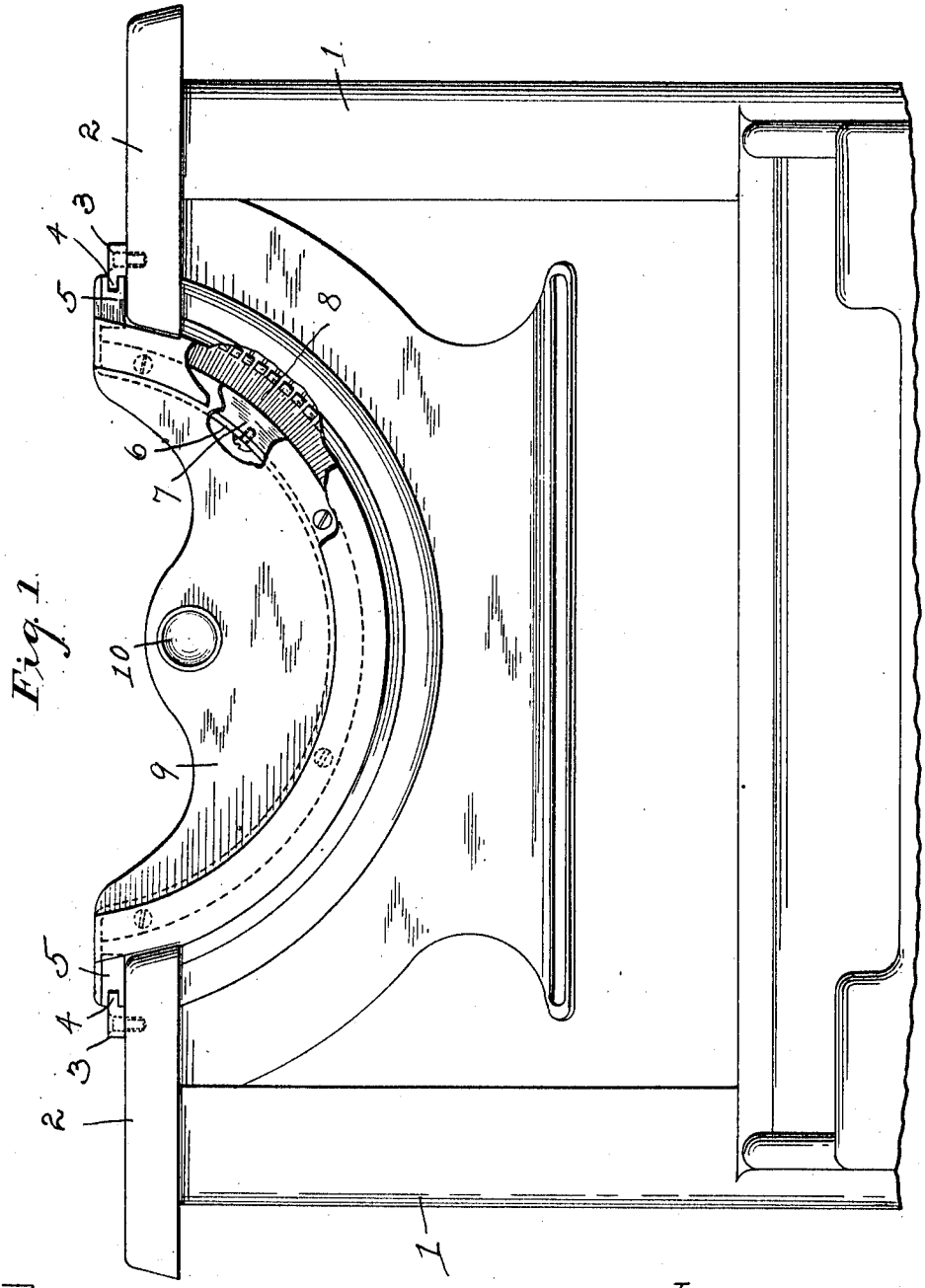

Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

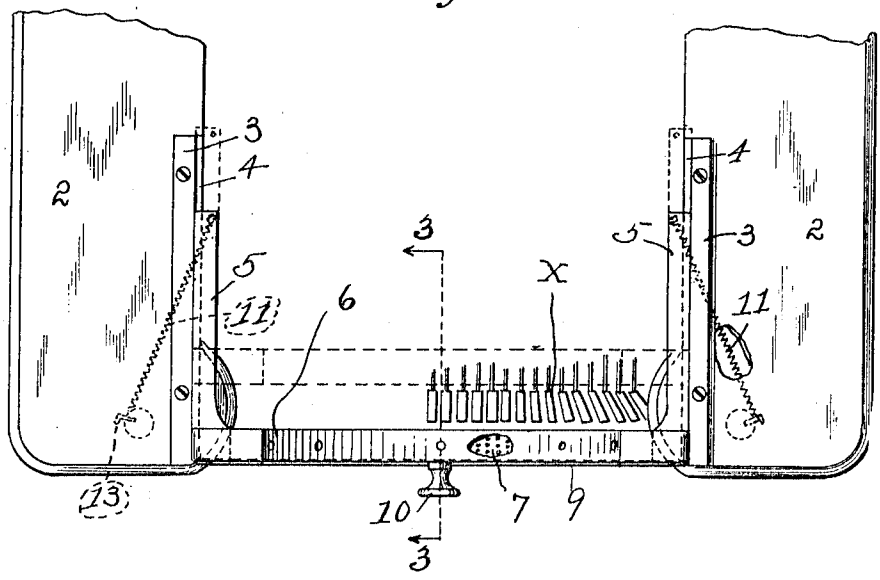
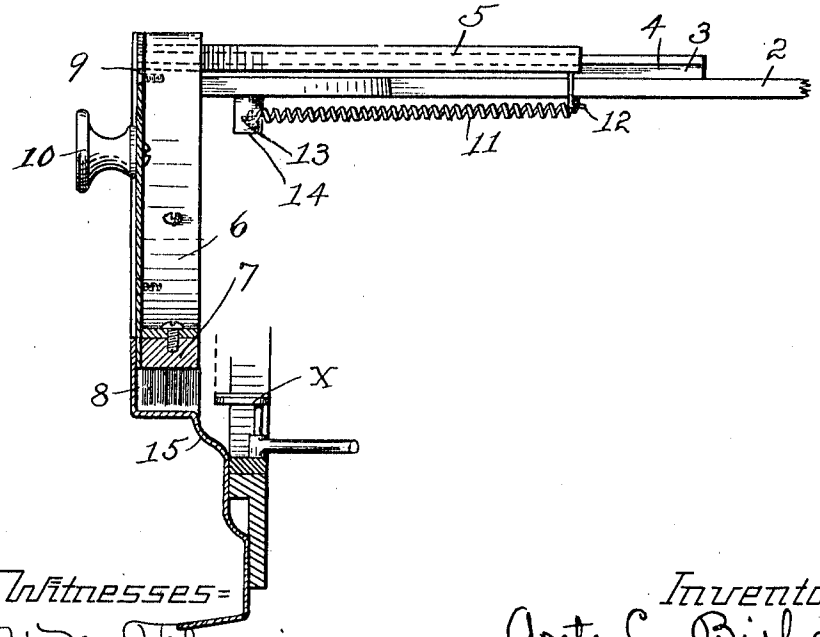


Fig. 3.



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UNITED STATES PATENT OFFICE.

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TYPE-CLEANER.

955,939. Specification of Letters Patent. Patented Apr. 26, 1910.

Application filed February 19, 1909. Serial No. 478,762.

To all whom it may concern:

Be it known that I, ARETE C. BISHOP, a citizen of the United States, residing at East Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Type-Cleaners, of which the following is a specification.

This invention relates generally to type cleaners for typewriting machines, and particularly to that class of such devices wherein the type are adapted to be thoroughly cleaned by a suitable brush.

More specifically the invention relates to a cleaner for typewriter type wherein a suitable member carrying a brush, normally out of the range of the type, is adapted to be moved over the gang of type as they remain at rest and sweep the dirt from the face thereof.

Still more specifically the invention relates to suitable guides arranged upon the typewriter frame and supporting a suitable carriage having a brush which is normally held out of range of the type, but is adapted to be moved back and forth across the face of the gang of type when they are idle.

The invention may be further briefly summarized as consisting in the construction and combinations of parts hereinafter set forth in the following description, drawings and claims.

Referring to the drawings, Figure 1 is a front elevation of a portion of the frame of a modern typewriter with my device applied thereto; Fig. 2 is a top plan view of the frame with the device in place; and Fig. 3 is a section upon the line 3—3 of Fig. 2.

In carrying out the invention any preferred form and construction of parts may be employed so long as they possess the necessary characteristics, but I have shown one form in the drawings which meets the requirements very effectively, and in such embodiment 1 represents the side frames of the machine supporting the top frame 2 which is provided with suitable guide members 3 having guiding beads 4. Slidably mounted upon these guiding beads are the side members 5 of the carriage 6 which is in the form of a plate of a shape to conform to the arrangement of the type as they stand in rest position. In this instance it is semi-circular or arc-shaped as the type are shown in Fig. 1 and Fig. 2 in such arrangement. Secured on the end face of this plate 6 is a semi-circular or arc-shaped brush back 7 adapted to receive and support suitable bristles 8 which are of a length such that they will brush the face of the type when they are moved across the same.

Secured to the plate 6 and to the back 7 of the brush is a front plate 9 substantially the form shown in Fig. 1 and having thereon a thumb piece 10 which may be grasped by the operator in using the device.

The normal position of the carriage is forward and this is brought about by springs 11 each engaging at one end a hook 12 secured to each guiding member 3 near its end and engaging another hook 13 mounted upon a stud 14 forming a part of the frame.

In using the device the operator may devote very little time in cleaning the type for every now and then the thumb piece may be grasped and the carriage 6, carrying the brush, may be shifted back and forth across the face of the type, thus thoroughly cleaning the same, and when not in use it is out of the range of the type in the position shown in Fig. 2, it being held in such position by the springs 11.

The brush is hidden from view by a suitable guard plate 15 secured to the machine frame in any suitable manner.

Having described my invention, I claim:—

1. In a front-strike typewriter, in combination, a frame having an upper member provided with an opening therein for the passage of the type, guiding members one arranged on each side of such opening, a carriage slidably mounted in said guiding members and adapted to be shifted across the faces of the type as they remain in a state of rest, a cleaning device upon said carriage and adapted for engagement with the faces of the type, and means whereby said carriage may be shifted to move the cleaning device across the faces of the gang of type.

2. In a typewriter, in combination, a frame having an upper member provided with an opening therein, guiding members rigid with the frame and arranged one on each side of such opening, a carriage slidably mounted in said guiding members and conforming to the configuration of the gang of type when in a state of rest and adapted to cross the faces of said type when in such position, a cleaning brush mounted upon said carriage and adapted for engagement with the faces of the gang of type, and

means whereby said carriage may be shifted to move the brush across the faces of the gang of type.

3. In a typewriter, in combination, a frame having an upper member provided with an opening therein, guiding members rigid with the frame and arranged one on each side of such opening, a carriage slidably mounted in said guides and conforming to the configuration of the gang of type when in a state of rest and adapted to cross the faces of said type when in such position, a cleaning brush mounted upon said carriage and adapted for engagement with the faces of the gang of type, means for normally holding said carriage and brush out of the range of the type, and means whereby said carriage may be shifted to move the brush across the faces of the gang of type.

4. In a typewriter, in combination, a frame having an upper member provided with an opening therein, a guiding member on each side of the opening and secured to the frame, a carriage slidably mounted in said guides and conforming to the configuration of the gang of type when in a state of rest and adapted to cross the plane of the gang of type when in such position, a cleaning brush mounted in said carriage and adapted for engagement with the gang of type, a spring for normally holding said carriage and brush out of the range of the type, and means whereby said carriage may be shifted to move the brush across the faces of the type.

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

ARETE C. BISHOP.

Witnesses:
G. O. FARQUHARSON,
V. L. FISHER.