

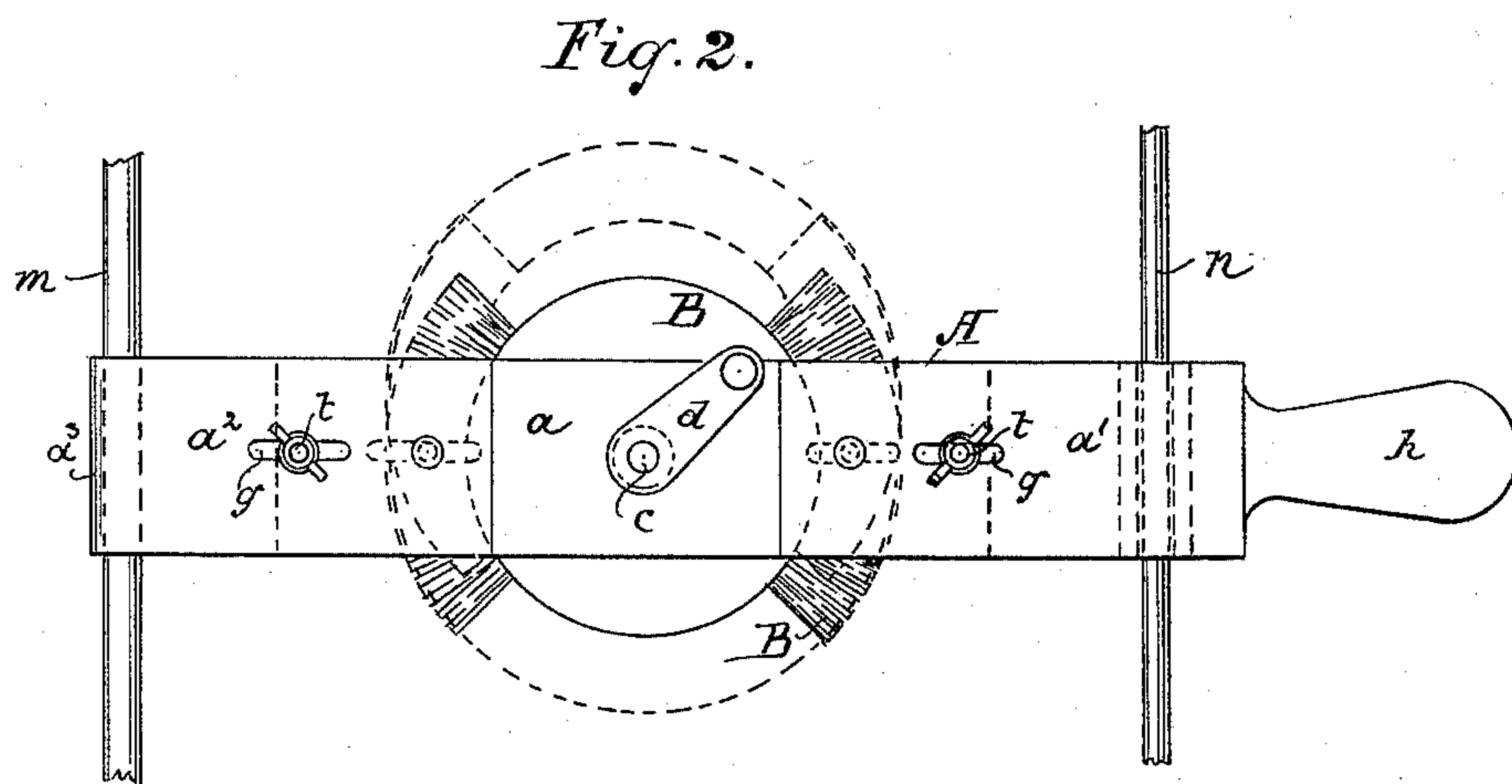
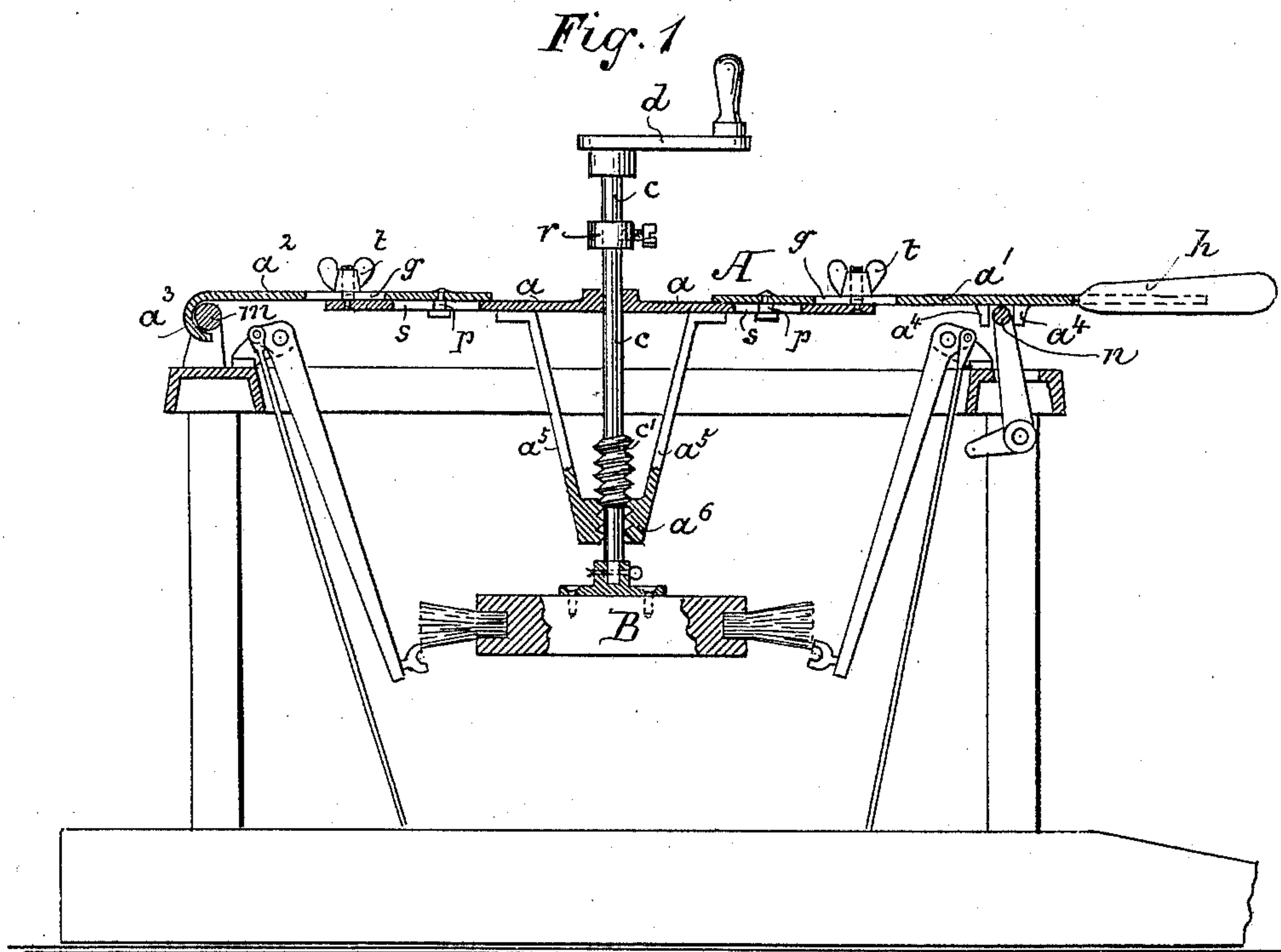
(No Model.)

J. R. KEATINGE.

TYPE CLEANER FOR TYPE WRITING MACHINES.

No. 475,777.

Patented May 31, 1892.



Witnesses:

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Philip J. Ryan.

Inventor:

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per Charles Raettig  
his Attorney

# UNITED STATES PATENT OFFICE.

JOHN R. KEATINGE, OF BROOKLYN, NEW YORK.

## TYPE-CLEANER FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 475,777, dated May 31, 1892.

Application filed December 12, 1891. Serial No. 414,819. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN R. KEATINGE, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, 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 machines for cleaning types mounted on the type-bars of a type-writing or printing machine; and it consists in an improved apparatus containing a rotary brush mounted upon an upright shaft having its bearings in an adjustable frame, as herein-  
after described.

In the accompanying drawings, Figure 1 is a longitudinal section through my apparatus placed upon a type-writing machine ready for work. Fig. 2 is a plan view of my apparatus.

Within a frame A is mounted in suitable bearings a vertical shaft *c*, carrying above a crank *d* and having secured to its lower end a rotary brush B by means of a split-pin or any other suitable contrivance, which permits its easy removal for the purpose of exchanging the brushes or for easier transportation and storage. The shaft *c*, preferably near its lower end, is provided with screw-threads *c'*, which engages with those cut into the lower bearing *a*<sup>6</sup> on frame A and with a collar *r*.

The frame A preferably consists of a central portion *a*, through which the shaft *c* is passing and to which is also secured the lower screw-thread bearing *a*<sup>6</sup> by means of the bracket *a*<sup>5</sup>. Two slots *s* near each end of part *a* receive pins *p*, secured upon the extension-pieces *a'* and *a*<sup>2</sup>, while the shanks of the thumb-screws *t*, secured to the extreme ends of part *a*, engage in the slots *g*, provided therefor in the extension-pieces *a'* and *a*<sup>2</sup>, and thus allow the frame A to be extended lengthwise, so as to suit the different sizes of type-writing machines. The extension *a'*, which is intended to be placed in front, carries the handle *h* and below the guide-pieces *a*<sup>4</sup>, while to the end of the extension *a*<sup>2</sup> is secured a semi-cylindrical clamp *a*<sup>3</sup>.

When the apparatus is designed to be used for one particular size of type-writing machines only, the handle *h*, clamp *a*<sup>3</sup>, and guide-pieces *a*<sup>4</sup> will be attached to the respective ends of the part *a* and the extensions *a'* and *a*<sup>2</sup>, and the thumb-screws and slots will be dispensed with entirely.

The operation of using the apparatus is now as follows: The brush B, having been raised to its highest position, is dropped into the space between type-bars until the frame A touches the two parallel rods generally provided in the front and in the rear on the top of a type-writing machine and the extensions *a'* and *a*<sup>2</sup> are set and secured in such a manner that when the brush is in a central position the clamp *a*<sup>3</sup> engages the rod *m* in the rear and the guide-pieces *a*<sup>4</sup> slip over the rod *n* in front of the machine. The apparatus having been thus once adjusted can be used for the same kind of machines by inserting the brush into the space and then backing the guide-lock *a*<sup>3</sup> over the bar *m* and dropping the guides *a*<sup>4</sup> over the bar *n* and then holding the frame in a central position by gently pressing with one hand upon the handle *h*, while with the other the shaft *c* is given a number of turns to the right till it is checked by the collar *r*, provided upon the shaft *c*, when the same number of turns is made to the left, thus returning the brush to its primary position. It is evident that the screw provided on the shaft *c* will communicate the reciprocating spiral motion to the outer surface of the brush and effect a thorough cleaning of the types by bringing fresh bristles in contact with the types at each successive turn of the shaft. If the types are arranged in an ellipse instead of in a circle, the operation has to be repeated twice and the frame should be held in two positions, the second position of the brush being indicated by dotted lines in Fig. 2 of the drawings.

Having thus described my invention, I claim—

In a machine for cleaning the types of type-writing machines, a frame guided and supported by the parallel guide-rods of the type-



writing machine and provided with bearings  
and brackets for a vertical shaft, in combi-  
nation with a brush mounted upon a vertical  
shaft and capable of receiving a spiral recip-  
5 roating motion, as and for the purposes here-  
in shown and set forth.

Signed at New York, in the county of New

York and State of New York, this 11th day of  
December, A. D. 1891.

JOHN R. KEATINGE.

Witnesses:

CHAS. STRAUSS,

JOHN W. WELLBROCH.