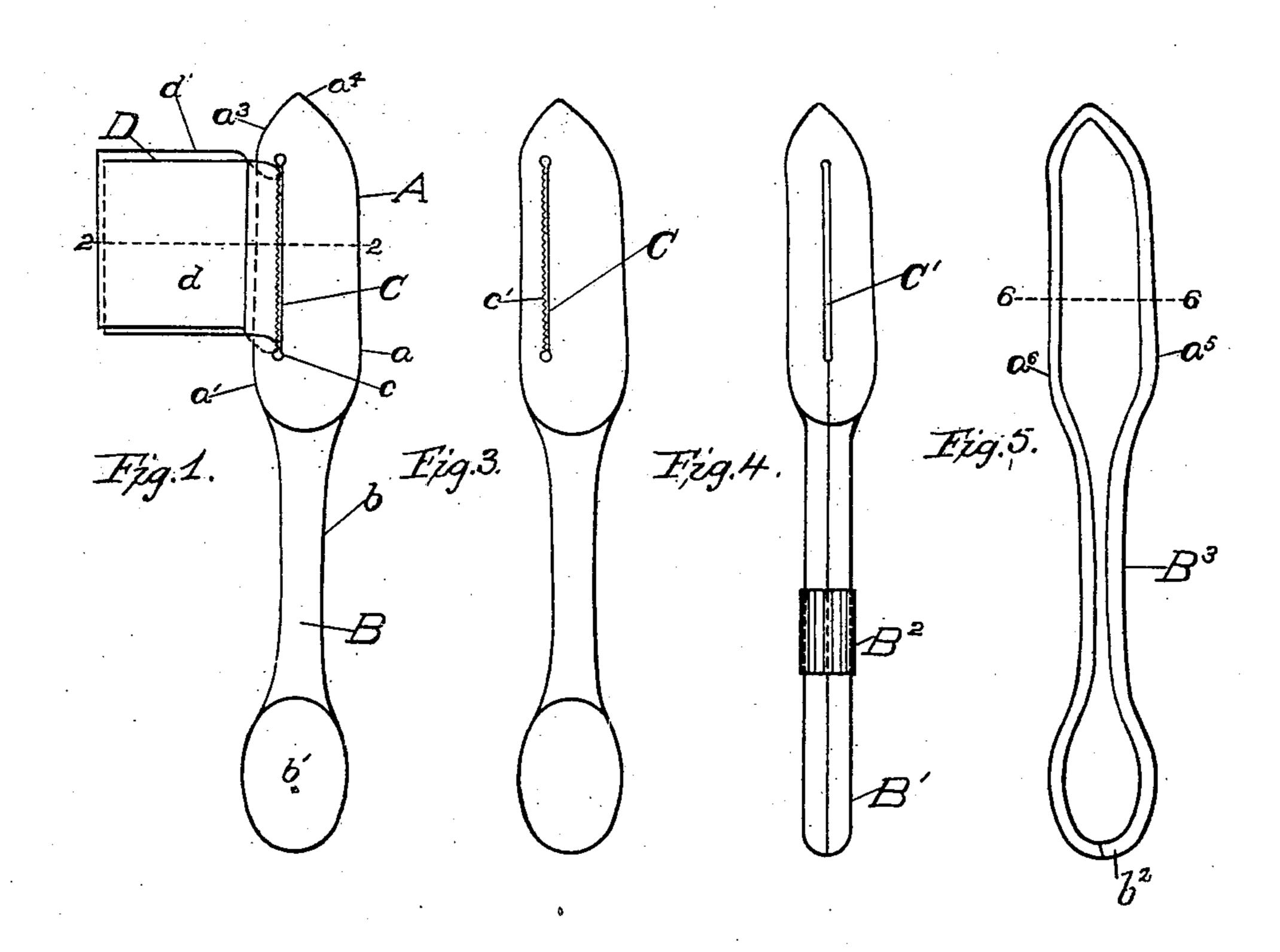
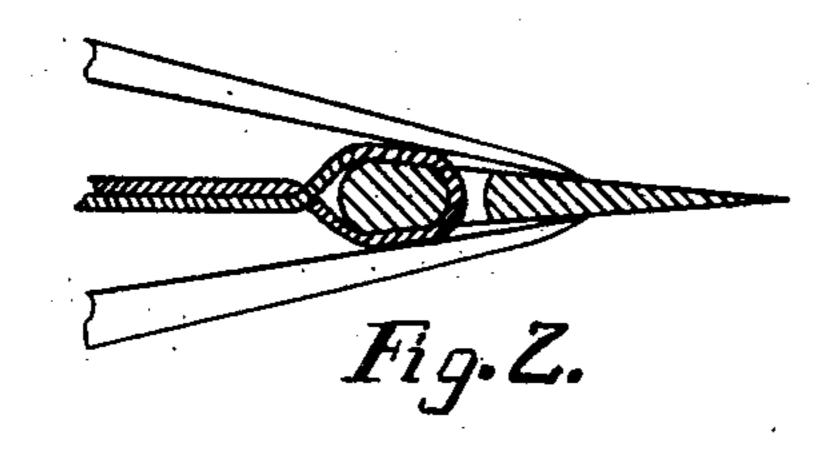
No. 762,570.

PATENTED JUNE 14, 1904.

## E. M. ZACHARIAS. RULING PEN CLEANER. APPLICATION FILED JULY 12, 1902.

NO MODEL.





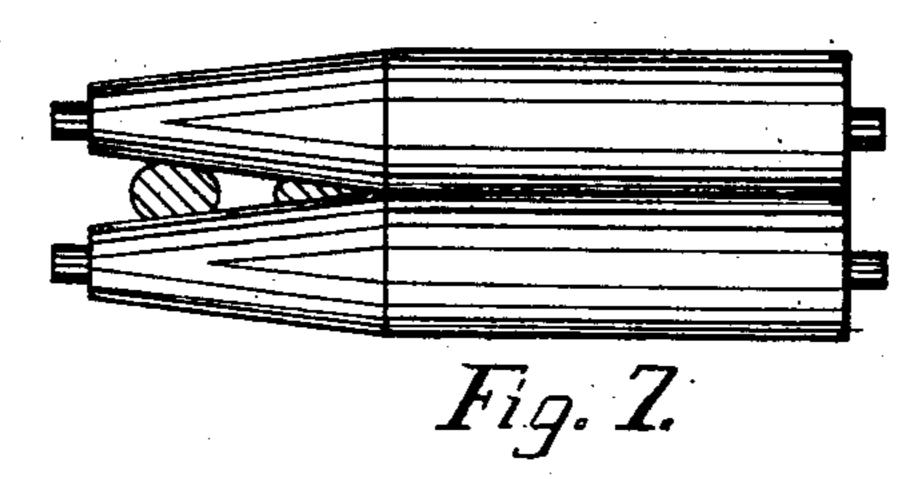


Fig. 5.

WITNESSES:

C. W. Stinsen.

Edr. M. Zacharias

## United States Patent Office.

EDWARD M. ZACHARIAS, OF BROOKLYN, NEW YORK.

## RULING-PEN CLEANER.

SPECIFICATION forming part of Letters Patent No. 762,570, dated June 14, 1904.

Application filed July 12, 1902. Serial No. 115,388. (No model.)

To all whom it may concern:

Be it known that I, Edward M. Zacharias, a citizen of the United States, and a resident of the borough of Brooklyn, city and State of New York, have invented certain new and useful Improvements in Ruling-Pen Cleaners, of which the following is a specification.

The subject of the present invention is a simple, inexpensive, and useful device adapt-10 ed for service in cleaning ruling-pens. As is well known, the most common practice to accomplish such cleaning is to hold the pen in one hand and draw a piece of cloth or other suitable material between the end portion of 15 the blades or members constituting the inkcarrying parts of the pen. Such method of cleaning is open to objection, notably on account of the fact that the user's fingers are liable to become soiled, besides involving the 20 presence of a loose piece of rag or other material around the drawing-board or other work. By my invention I obviate such objection by providing a simple thin blade device to which a strip of fabric may be readily attached and 25 conveniently removed for replacement for a fresh piece when requisite.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of my improved pen-cleaning 30 device having a strip of cloth applied thereto. Fig. 2 is a horizontal sectional plan, on a larger scale, of the cleaning device disclosed in Fig. 1, the section being taken in the plane indicated by the dotted lines 22 of said latter 35 figure. Fig. 3 is a side view of the cleaning device with the fabric removed. Figs. 4 and 5 are somewhat similar views illustrating modifications. Fig. 6 is a sectional plan view of the device shown in Fig. 5, the section be-40 ing taken on the dotted line 6 6 of said latter figure. Fig. 7 is a detail view illustrating a manner by which the flattened part of the device disclosed in Fig. 5 may be produced.

Similar reference characters designate corresponding parts throughout the several figures of the drawings where they occur.

The main or prominent part of the device integrally comprises a blade A and a handle extension B, the latter involving the narrow or neck portion b and larger rounded extremity b'. The blade A, while comparatively narrow

in cross-section throughout, converges to the forward vertical edge a, the back edge a'being, for the purposes of effective cleaning and also of strength, slightly thicker. At the 55 base end where it merges into the neck the material of the blade thickens to also contribute strength. The upper part of the front edge of the blade rounds to the rear, where it intersects at the top above  $a^3$  to form 60 a conjunction there with a point  $a^*$ , which may be employed to dislodge dried ink from the pen-blade and for other purposes. In the body of the blade A is a vertically-extended slot C, which terminates at its upper and 65 lower ends in a small opening c of somewhat larger diameter. That portion of the blade forming the rear edge c' of the slot C is toothed or serrated, as indicated most clearly in Fig. 3. In practice a strip or length D of 70 fabric is passed through the slot, so that it can be folded back, and one of its folds, d, passed through a slit therefor in the other fold, d', to secure such strips in engagement with the blade. With the parts thus con- 75 ditioned the blade A can be forced between the two members of the pen, the front edge a and thin cross-sectional character of the blade A permitting such introduction between the pen members without occasioning 80 any undue force or strain. In moving through between such members the blade will evenly and regularly draw the fabric after it, thereby causing such fabric to remove and receive the ink from the pen. The serrated edge c' 85 of the slot operates to maintain the fabric in desirable spread condition and prevents it from becoming curved or bunched on the blade. By simply shifting the fold d relative to the fold d' new cleaning-surface of the fabric can 90 be brought into play to coöperate more immediately with the blade.

Instead of passing the strip of fabric through the slot and securing such strip, as indicated in Figs. 1, 2, and 3, the material of which the 95 blade-handle is made can possess sufficient resiliency to permit the split handle B', Fig. 4, to be spread sufficiently for the introduction of the fabric into the slot C'. A clamping-ring B<sup>2</sup> can be slipped upon the handle to firmly 100 hold its members together.

The general configuration and capacity of

the blade, neck, and handle can be secured by bending a single piece of wire  $B^3$  so that its terminal portions  $b^2$  overlap each other and are capable of being separated laterally to enable the fabric to be introduced at this point, if desired. The blade-like effect of the upper portions  $a^5$   $a^6$  can be attained by subjecting them to pressure. Fig. 7 indicates how this may be done by passing them between two appropriately-shaped rolls.

From the foregoing it will be appreciated that the improved cleaning device is simple, comparatively inexpensive, and can be used without liability of the fingers of the operator becoming soiled. Moreover, it will serve as a definite anchoring device for the cloth when not in use, so that the latter is not liable

to become displaced or lost.

I do not desire to be understood as limiting myself to the several constituents of the device disclosed herein, but reserve the right to such modifications and changes as are within the scope of my invention.

Having now described my invention, what

I claim as new, and desire to secure by Letters 25 Patent, is—

1. A ruling-pen cleaner comprising a blade and a handle, the former having a slot into which a fabric may be introduced and secured.

2. A ruling-pen cleaner comprising a blade 30 and a handle, the former having a slot and a serrated edge to adapt it for engagement by

a cleaning fabric.

3. A ruling-pen cleaner comprising a blade and a handle, the former converging to a thin 35 front edge having a rearward turning at the top intersecting a bevel forwardly extending from the upper end of the rear edge to form a point, said blade also having a vertical slot, the rear edge of which is serrated.

In testimony whereof I, Edward M. Zacharias, have signed my name to this specification, in the presence of two subscribing wit-

nesses, this 7th day of July, 1902.

EDW. M. ZACHARIAS.

Witnesses:

JOHN P. O'BRIEN, C. V. LEWIS.