

No. 622,882.

Patented Apr. 11, 1899.

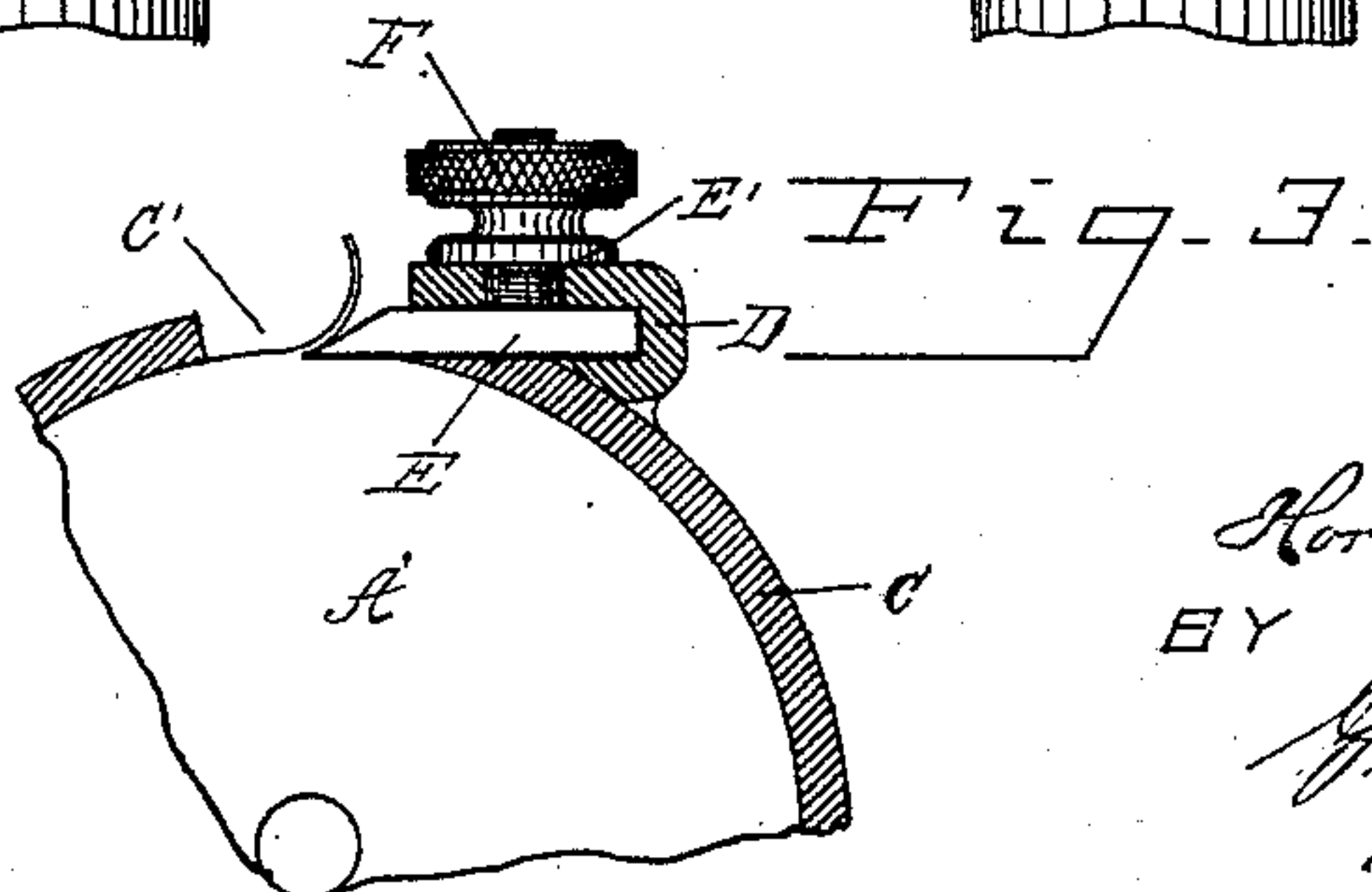
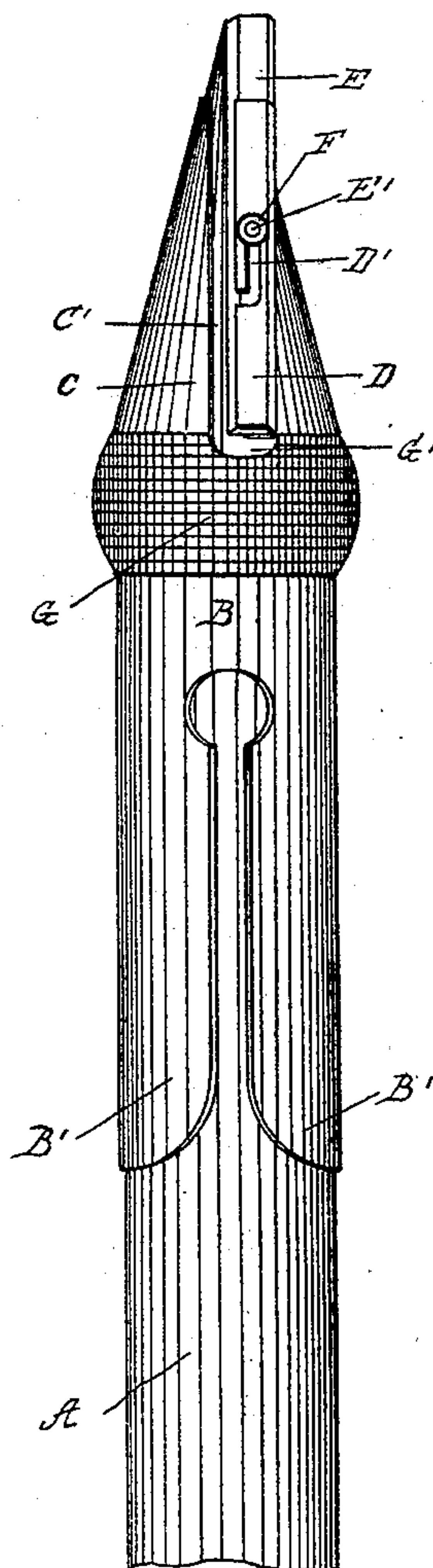
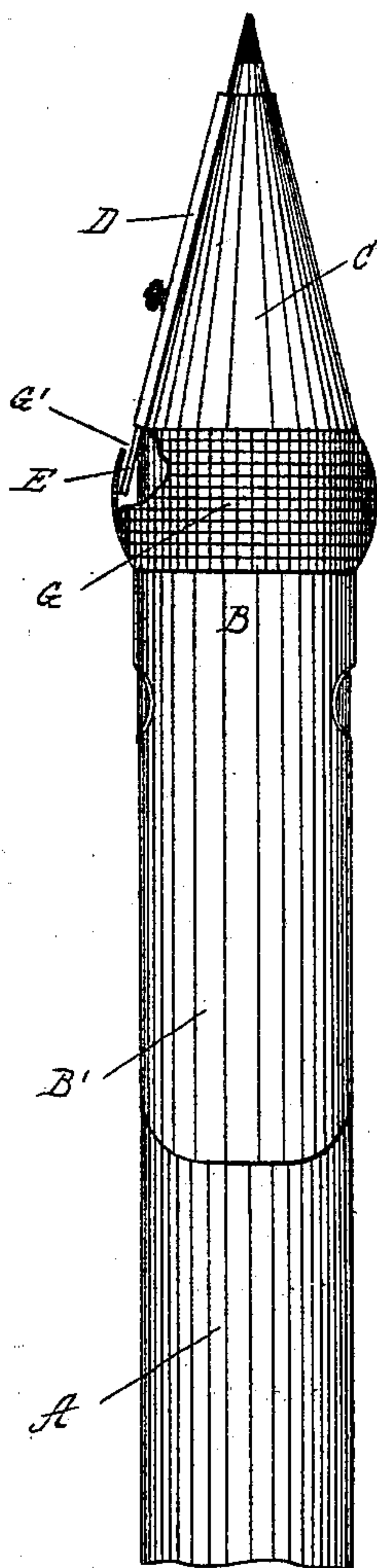
H. BUCHANAN.
PENCIL SHARPENER.

(Application filed Feb. 8, 1898.)

(No Model.)

Fig-2.

Fig. 1.



WITNESSES:

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HORACE BUCHANAN, OF LITTLE FALLS, NEW YORK, ASSIGNOR TO FRANK
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PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 622,882, dated April 11, 1899.

Application filed February 8, 1898. Serial No. 669,480. (No model.)

To all whom it may concern:

Be it known that I, HORACE BUCHANAN, a citizen of the United States, residing at Little Falls, in the county of Herkimer and State of New York, have invented a certain new and useful Improvement in Pencil-Sharpeners, of which the following is a specification.

This invention relates to improvements in pencil-sharpeners, and has for its object to provide a pencil-sharpener which may remain permanently on the pointed end of the pencil and permit the lead of the pencil to be sharpened to any desired point. I attain this object by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the device, showing the knife in position for sharpening the lead of the pencil to a sharp point. Fig. 2 is a similar view, the knife and guard-channel being shown in outer edge view. In this view the sharpening-knife is drawn back, in which position it is held when the pencil is in use, portions of the corrugated ring being removed for the purpose of showing the rear end portion of the knife. Fig. 3 is an enlarged fragmental cross-section of the conical tip, showing the construction of the guard-channel, the guide-pin, and clamping-nut engaging same.

Similar letters refer to corresponding parts throughout the several views.

A represents the pencil.

B represents a tubular body adapted to fit over the pencil and is held against accidental removal by two spring-tongues B', formed by slotting the rear end portion of the said tubular body. The forward end of the tube terminates in a conical tip C, which is provided with a longitudinal slot C', open at its forward end and extending rearwardly to the base of the said tip. Secured to the conical tip and situated at one side of the said slot is a longitudinal guard-channel D, in which the sharpening-knife E is slidably mounted. The upper side of the guard-channel is provided with a longitudinal guide-slot D', adapted to receive a threaded guide-pin E', which is secured to the sharpening-knife. F represents a clamping-nut which engages the said guide-pin and is adapted to hold the knife in an adjusted position. This nut further provides a handle or knob by which the knife is moved

in a longitudinal direction. In order to permit the knife to be introduced into and removed from the guard-channel for the purpose of sharpening the knife, the side wall situated adjacent to the rear end of said slot is cut through toward the open side of the guard-channel, thus providing a passage through which the guide-pin may enter and easily reach the guide-slot.

G represents an annular corrugated or roughened ring formed integral with the tube and located at the base of the conical tip. This ring, which is made larger in diameter than the tube, is adapted to provide a gripping-surface for the fingers and prevent slipping when the device is turned or revolved. It further serves the purpose of a protecting-shield for the rear end portion of the sharpening-knife, which enters the interior of the ring through an opening G', located at the forward end of the ring directly in front of the rear end of the knife.

In operating the sharpener the knife is released from its retired position (indicated in Fig. 2) by partly unscrewing the clamping-nut and the knife pushed forward to an extent depending upon the character of the point desired. If a sharp point suitable for drawing is desired, the knife should extend beyond the end of the lead, as shown in Fig. 1. A dull point of greater resistance and suitable for writing may be obtained by adjusting the knife so that its forward end is situated above the end of the lead.

Another advantage of having the knife slidably mounted in the guard-channel is that the knife may be withdrawn when the pencil is in use, thus doing away with the objectionable obstruction a stationary knife would present on a similar device.

I do not desire to limit myself to the particular construction herein shown and described, as I am aware that many changes may be made in the construction of my improved pencil-sharpener without departing from the spirit and scope of my invention. For instance, the sharpening-knife may be differently constructed or the tube may be held to the pencil by other means than those shown.

Having thus described my invention, what

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

5 In a pencil-sharpener, which is adapted to remain permanently on the pointed end of the pencil, and which terminates in a conical tip C, and is provided with a longitudinal slot C', the guard-channel D secured to the body of the sharpener and which is provided with the slot D', combined with a sliding
10 blade, a threaded guide-pin E' secured thereto

and which slides freely back and forth in the slot, and a clamping-nut which is applied to the end of the screw and by means of which the blade is secured rigidly in position, substantially as shown and described.

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Witnesses:

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