

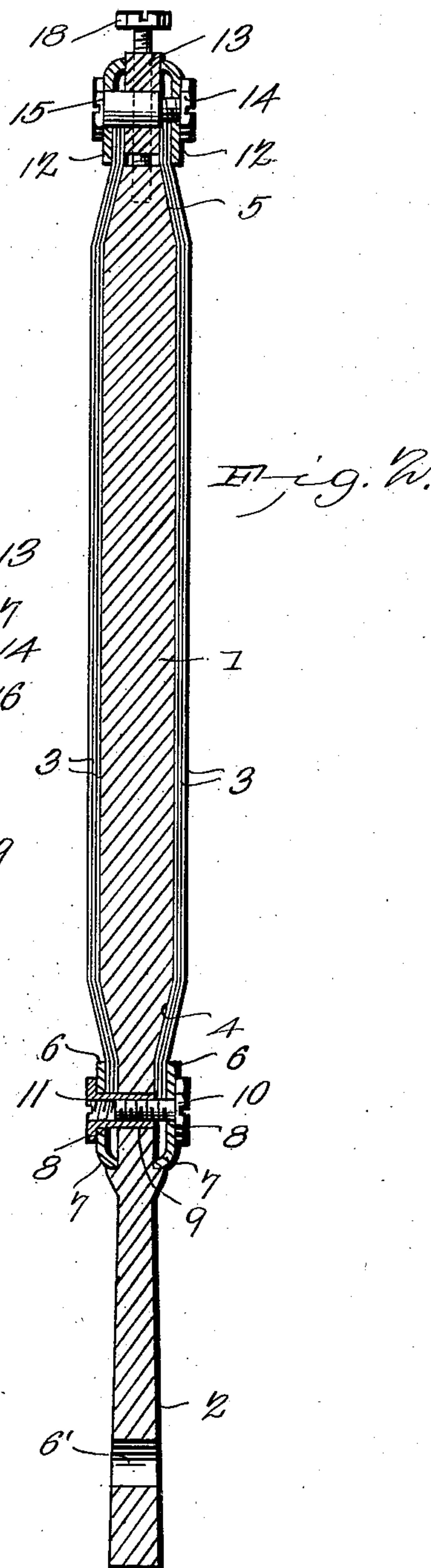
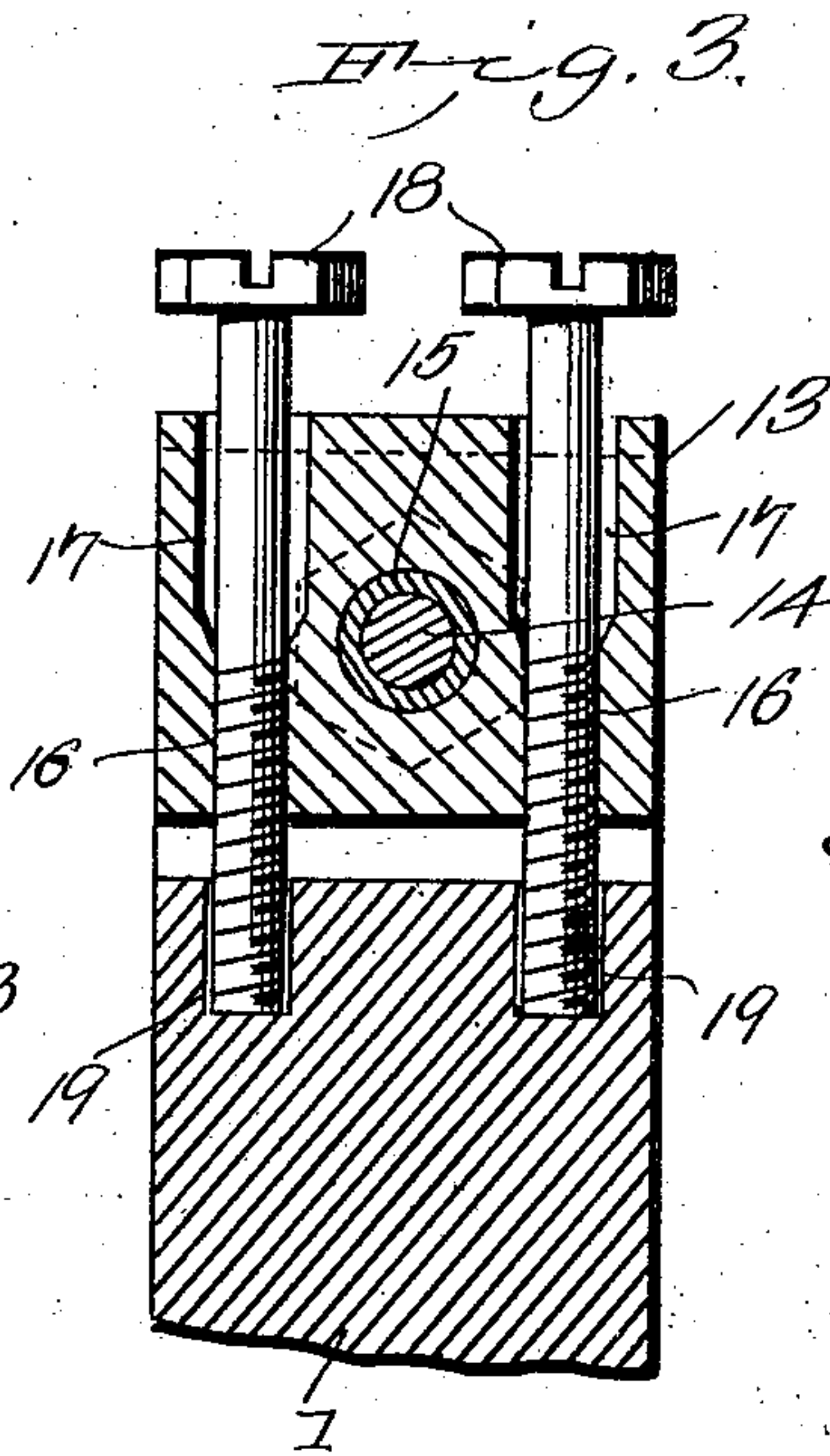
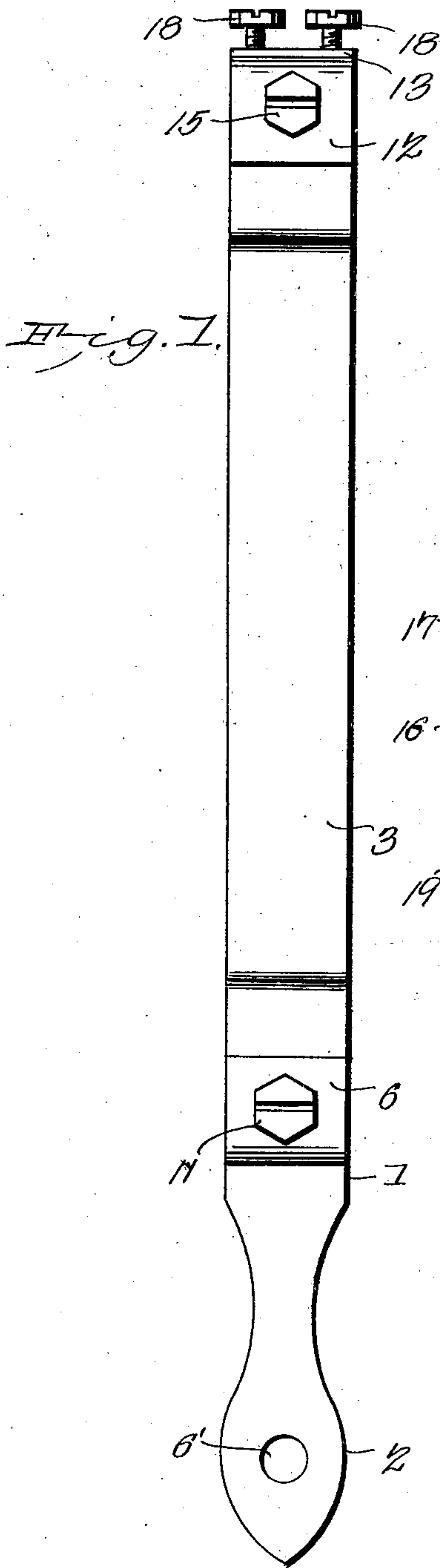
No. 713,199.

Patented Nov. 11, 1902.

O. L. BRAINARD.  
HAND BUFFER.

(Application filed Mar. 31, 1902.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

OMAR LOYAL BRAINARD, OF VERDI, NEVADA.

## HAND-BUFFER.

SPECIFICATION forming part of Letters Patent No. 713,199, dated November 11, 1902.

Application filed March 31, 1902. Serial No. 100,882. (No model.)

*To all whom it may concern:*

Be it known that I, OMAR LOYAL BRAINARD, a citizen of the United States, residing at Verdi, in the county of Washoe and State of Nevada, have invented a new and useful Hand-Buffer for the Use of Machinists and Metal-Workers, of which the following is a specification.

The invention relates to improvements in hand-buffers.

The object of the present invention is to improve the construction of hand-buffers and to provide a simple, inexpensive, and efficient device designed for polishing metal articles held in a vise, lathe, or in the hand and capable of enabling strips of emery-cloth to be stretched to the desired tension and to be readily removed to successively expose a number of strips.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a side elevation of a hand-buffer constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view on the line 2 2 of Fig. 1. Fig. 3 is an enlarged sectional view of the outer end of the buffer.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a stock or bar provided at one end with a handle 2 and having a body portion adapted to receive strips 3 of emery-cloth and provided with tapered inner and outer portions 4 and 5, and having straight parallel faces connecting the angularly-disposed faces of the tapered portions. The stock or bar is preferably constructed of wood to render it light and enable it to be handled without fatigue, and the handle is provided with an aperture 6 to permit the device to be hung up on a nail or other suitable support when not in use.

The strips of emery-cloth are clamped at their inner ends adjacent to the handle of the stock by means of opposite clamping-plates 6', provided with inturned end flanges 7, and having apertures 8, registering with an opening 9 of the stock or bar adjacent to the inner

end of the handle. The clamping-plates are connected by an adjusting device consisting of a screw 10 and a sleeve 11, which is interiorly threaded to receive the screw. The screw and the sleeve are provided at their outer ends with polygonal heads having grooves for the reception of a screw-driver. The polygonal heads are adapted to be engaged by a wrench, and the adjusting device can be operated either by a screw-driver or a wrench. The inwardly-extending flanges of the clamping-plates form fulcrums and the opposite ends of the plates are forced tightly against the strips by the adjusting device.

The outer ends of the strips of emery-cloth are engaged by a clamp composed of clamping-plates 12, arranged at opposite sides of an adjustable block 13, and secured to the same by means of a screw 14 and an interiorly-threaded sleeve 15. The sleeve and the screw are provided at their outer ends with heads having grooves and adapted to be engaged by a screw-driver or a wrench.

The adjustable block is provided with longitudinal bores having threaded inner portions 16 and enlarged counterbored outer portions 17 and adapted to receive a pair of adjusting-screws 18, having grooved polygonal heads at their outer ends. The inner ends of the screws are received within smooth bores or sockets 19 of the outer end of the stock, and the said screws are adapted to be adjusted to stretch the emery-paper to the desired tension. When a strip of the emery-cloth has become worn, the device may be reversed to bring the strip at the opposite side in position for use, and after both strips have become worn the clamping-strips may be loosened to permit the worn strips to be removed to expose the strips lying next to the outermost ones. The device is adapted to be operated in this manner until all the strips of emery-cloth have been used, and the device may then be supplied with a new set of strips.

What I claim is—

1. A hand-buffer comprising a stock or bar having a fixed handle, and clamps located at the inner and outer portions of the same and adapted to secure a series of strips of emery-cloth to the stock, and means for adjusting the outer clamp longitudinally of the stock



to stretch the strips to the desired tension, substantially as described.

2. A hand-buffer comprising a stock adapted to receive strips of emery-cloth, means for  
5 securing the inner ends of the strips to the stock, an adjustable block arranged at the outer ends of the strips, a clamping device mounted on the block for securing the strips to the same, and means for adjusting the  
10 block longitudinally of the stock, substantially as described.

3. A hand-buffer comprising a stock, designed to receive a series of strips of emery-cloth, clamping-plates located at opposite  
15 sides of the stock for engaging the inner ends of the strips, an adjusting device connecting the clamping-plates, an adjustable block arranged at the outer ends of the strips, clamping-plates located at opposite sides of the  
20 block and secured to the same, and means for adjusting the block longitudinally of the stock, substantially as described.

4. A hand-buffer comprising a stock designed to receive a series of strips of emery-  
25 cloth and provided at its outer end with sockets, a clamp for securing the inner ends of the strips to the stock, an adjustable block arranged at the outer end of the stock and provided with longitudinal bores having

screw-threads, clamping-plates mounted on 30 the block for securing the outer ends of the strips to the same, and adjusting-screws engaging the threads of the bores and fitting in the sockets of the stock, substantially as described. 35

5. A hand-buffer comprising a stock designed to receive strips of emery-cloth, an adjustable block arranged at the outer end of the stock, inner and outer clamping-plates provided with inwardly-extending flanges, 40 the outer clamping-plates being arranged on the said block, and adjusting devices connecting the clamping-plates, substantially as described.

6. A hand-buffer comprising a stock com- 45 posed of a body portion tapered at the ends, and a handle arranged at the inner ends of the body portion, inner and outer clamps located at the ends of the body portion and adapted to engage strips of emery-cloth, and 50 means for adjusting the outer clamp longitudinally of the stock, substantially as described.

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Witnesses:

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