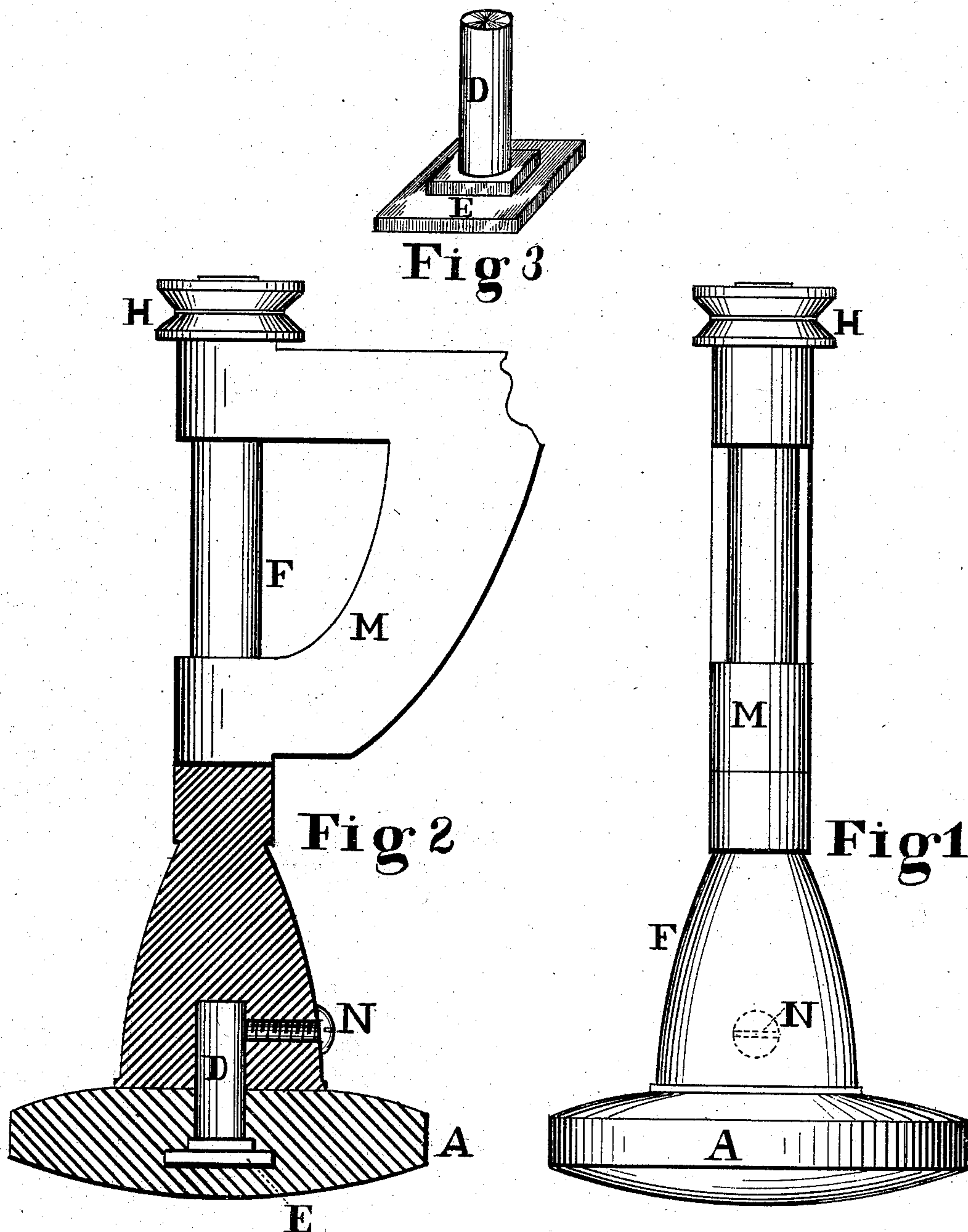


(No Model.)

F. W. STONE.  
BUFFING TOOL.

No. 257,903.

Patented May 16, 1882.



Witnesses  
*C. C. Tuttle*  
*W. J. Morse*

Inventor  
*Frank W Stone*  
per *C. C. Tuttle*  
Attorney



# UNITED STATES PATENT OFFICE.

FRANK W. STONE, OF LYNN, ASSIGNOR OF TWO-THIRDS TO FREDERICK S. ANDREWS, OF GLOUCESTER, AND FITZHUGH S. ANDREWS, OF ESSEX, MASSACHUSETTS.

## BUFFING-TOOL.

SPECIFICATION forming part of Letters Patent No. 257,903, dated May 16, 1882.

Application filed January 24, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK W. STONE, a citizen of the United States, residing at Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented a new and Improved Buffing-Tool for Buffing the Bottoms of Boot and Shoe Soles, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to that class of machines employed in the manufacture of boots and shoes for the purpose of scouring and cleaning the bottoms of the soles, and has for its object to produce a scouring-tool which shall be durable, easily and quickly connected with or detachable from its carrying shaft, inexpensive, and capable of being renewed at a trifling cost.

The invention consists in a pad, composed of rubber or other elastic substance, having a convex bottom face, covered with fine scouring material, attached directly to the surface of the pad, combined with a practically non-elastic shaft, having an angular base or head on one end, which head and a portion of the shaft are molded in the pad, with the opposite end and portion of the shaft projecting from the pad so as to form a tang, whereby the tool is secured to its carrying-shaft, all of which is hereinafter more fully described.

Figure 1 of the drawings is a front elevation of my improved tool connected with its carrying-shaft. Fig. 2 is a side elevation of the same, made partly in section. Fig. 3 shows the non-elastic shank portion of the tool detached from the pad.

This tool consists of an elastic yielding pad, A, and a practically non-elastic shaft, D, provided with an angular base or head, E. The pad A is composed of rubber, shaped in molds and tempered to be slightly elastic, so as to yield and adapt itself to the surface of the sole to be buffed or abraded. The shaft D and its base E are both composed of iron or other non-elastic substance, and are preferably made in one piece, with the conformation substantially

as shown in Fig. 3. It is combined with the pad A by having its base portion E molded in the pad, as shown in Fig. 2. The pad closes over the base E, so as to prevent the pad from pulling off, while the angular formation of the base E prevents the pad from turning thereon. The portion of the shaft D which projects from the pad A is preferably made cylindrical in form to enter a corresponding bore in its carrying-shaft F. It is held in the carrying-shaft F by set-screw N. Said carrying-shaft F is journaled in a frame, M, and is revolved by belt applied to pulley H, all in a manner well known in the art.

In other buffing-machines employing a rotary pad the abrasive surface of the pad has been composed of a disk of emery or glass coated cloth or paper held against the under side or face of the pad, and is detachable therefrom when worn out. In this my invention the abrasive substance is attached directly to the surface of the pad by means of glue, and the same surface may readily be recovered again and again, as occasion requires. By this invention I am enabled to make a compact, simple, cheap, and durable buffing-tool, which requires no artificial independent coverings, and may be renewed from time to time and at a trifling cost.

I am aware that elastic pads have been coated on their surfaces with emery, ground glass, or other polishing or scouring material, and I do not broadly claim such construction.

I claim—

The improved tool above described, consisting of the elastic yielding pad A, having its bottom face covered with fine emery or other suitable scouring material attached directly to the surface of the pad, the non-elastic shaft D, and base E, molded in the pad, substantially as set forth.

FRANK W. STONE.

In presence of—

C. B. TUTTLE,  
FRANKLIN GRAY.