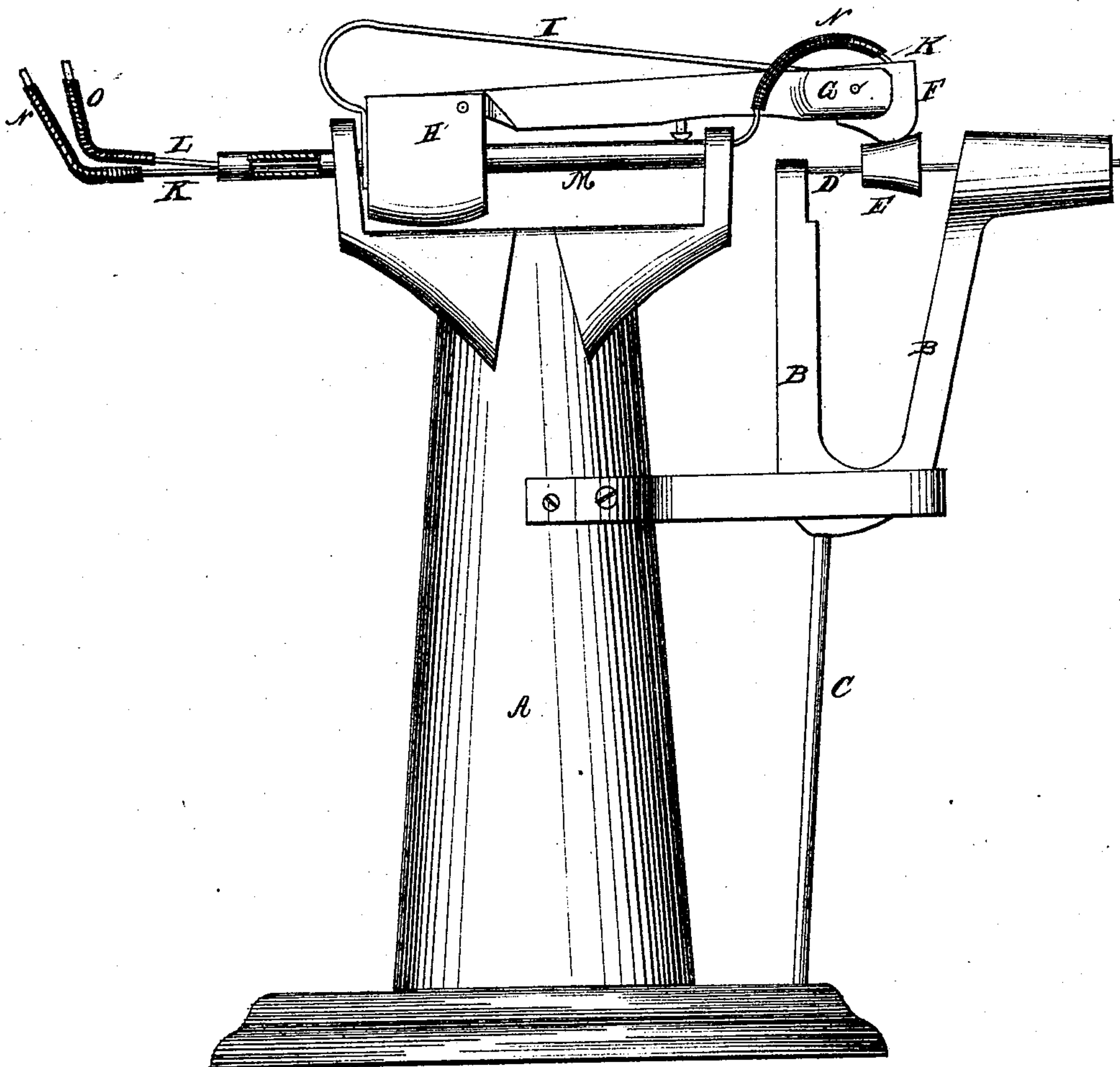


W. JOINT & G. B. DUNHAM.  
HEEL-POLISHING MACHINE.

No. 171,515.

Patented Dec. 28, 1875.

Fig. 1.



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Fig. 2.

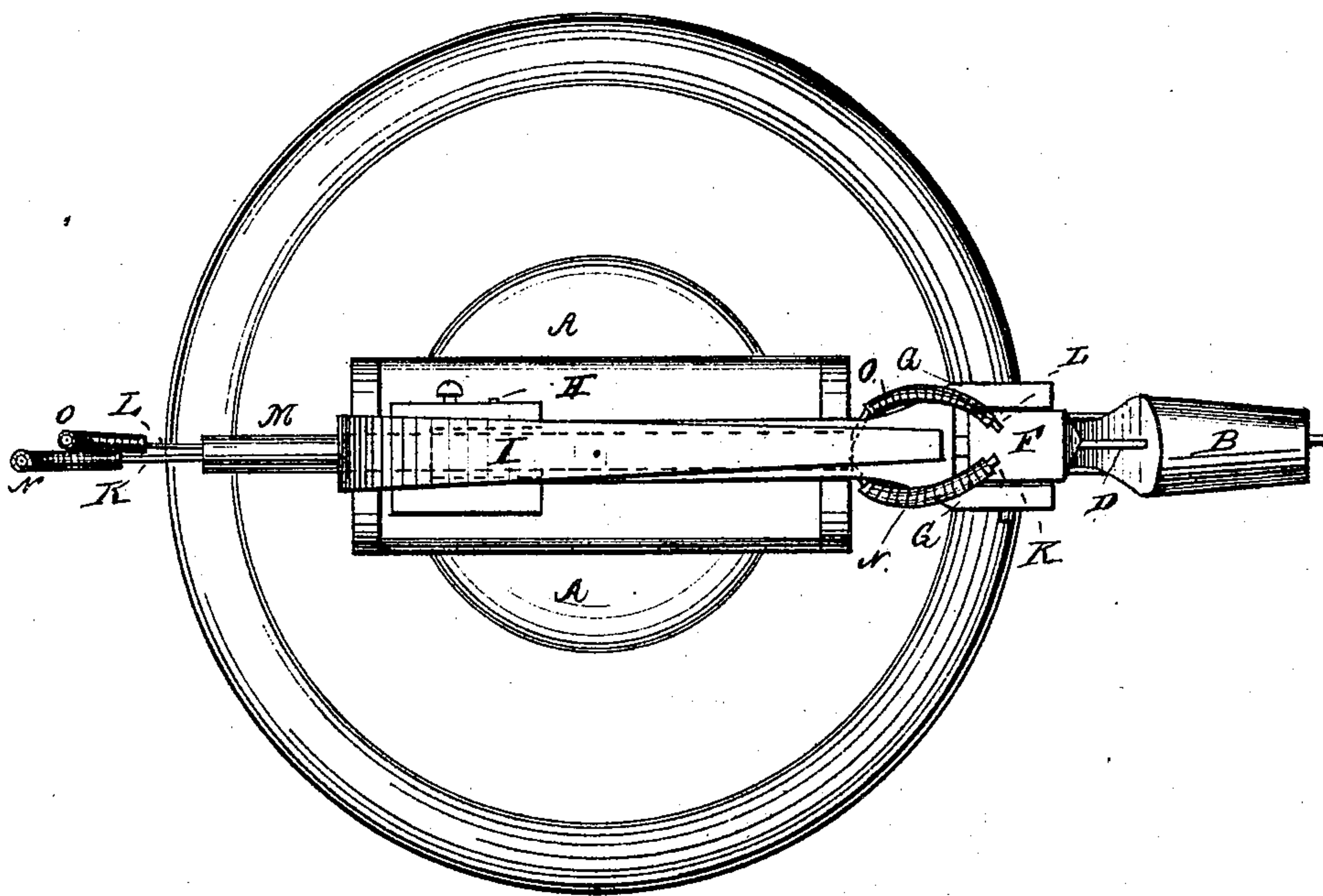
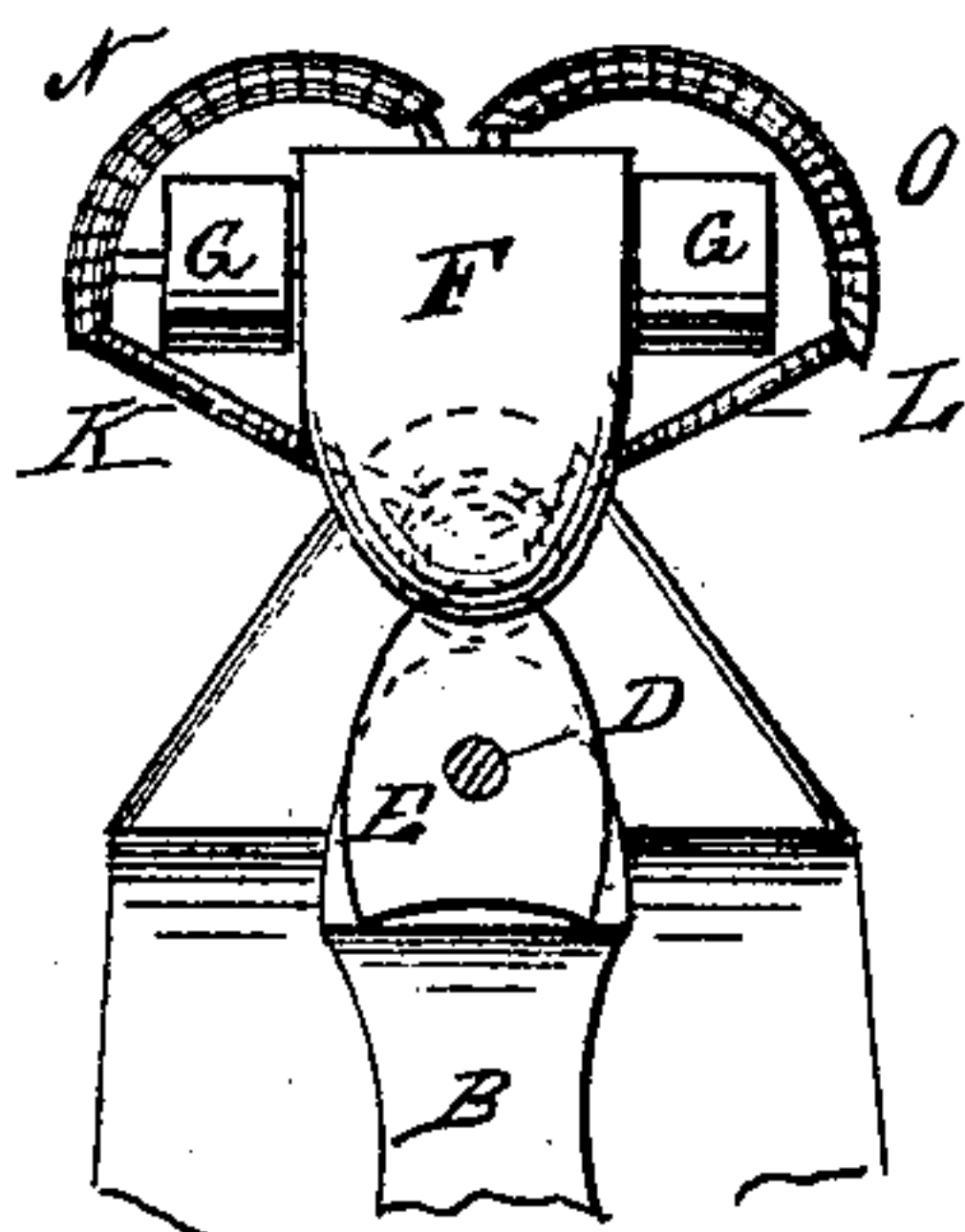


Fig. 3.



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# UNITED STATES PATENT OFFICE.

WILLIAM JOINT AND GEORGE B. DUNHAM, OF LYNN, MASSACHUSETTS.

## IMPROVEMENT IN HEEL-POLISHING MACHINES.

Specification forming part of Letters Patent No. **171,515**, dated December 28, 1875; application filed August 31, 1875.

*To all whom it may concern:*

Be it known that we, WILLIAM JOINT and GEORGE B. DUNHAM, both of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Machines for Polishing Boot-Heels; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing and to the letters of reference marked thereon, which form a part of this specification.

In the accompanying drawings, Figure 1 is a side view of our improved machine. Fig. 2 is a top view of the same. Fig. 3 is a detached front view of the burnishing-tool, with the heel in place upon the clamping-spindle, which is shown in transverse section, with the steam-pipes and other adjacent parts of the machine.

Our invention consists of the combination of a hollow rocking-shaft and polishing-tool with two steam-pipes provided with flexible joints, all of which will be fully described in the following specification.

In the application of our improvements the standard or column A, the jack B, supporting-rod C, and clamping-spindle D may be of the usual construction. The heel E is seen in place under the polishing-tool F, which is supported on the tool-arm G, which is hinged up-

on the pivot H and pressed down by the plate-spring I, as in other machines already in use.

The steam is applied to the machine in the following manner: The two steam-pipes K and L pass through the hollow shaft M, in which they are incased in wood or some other poor conductor of heat. These steam-pipes are also provided with steam-joints N N and O O, to facilitate the working of the tool-arm and polishing-tool F. This tool is made hollow, and a current of steam enters its chamber through one of the steam-pipes—say, the pipe L—and returns by the other pipe K, the shaft M and packing therein serving to prevent these pipes from cooling as the steam passes from and returns to the boiler.

Having described our invention, we claim—

In a machine for polishing the heels of boots and shoes, the combination of a hollow rocking-shaft and polishing-tool with the steam-pipes L and K passing through the shaft and into the tool, as shown, for the purpose described.

In testimony that we claim the foregoing as our own, we affix our signatures in the presence of two witnesses.

WILLIAM JOINT.

GEORGE B. DUNHAM.

Witnesses:

BENJ. A. WARD,

FRED J. JOINT.