

CHARLES H. HELMS.

Improvement in Boot and Shoe Heel Polishers.

No. 119,707.

Patented Oct. 10, 1871.

Fig: 1.

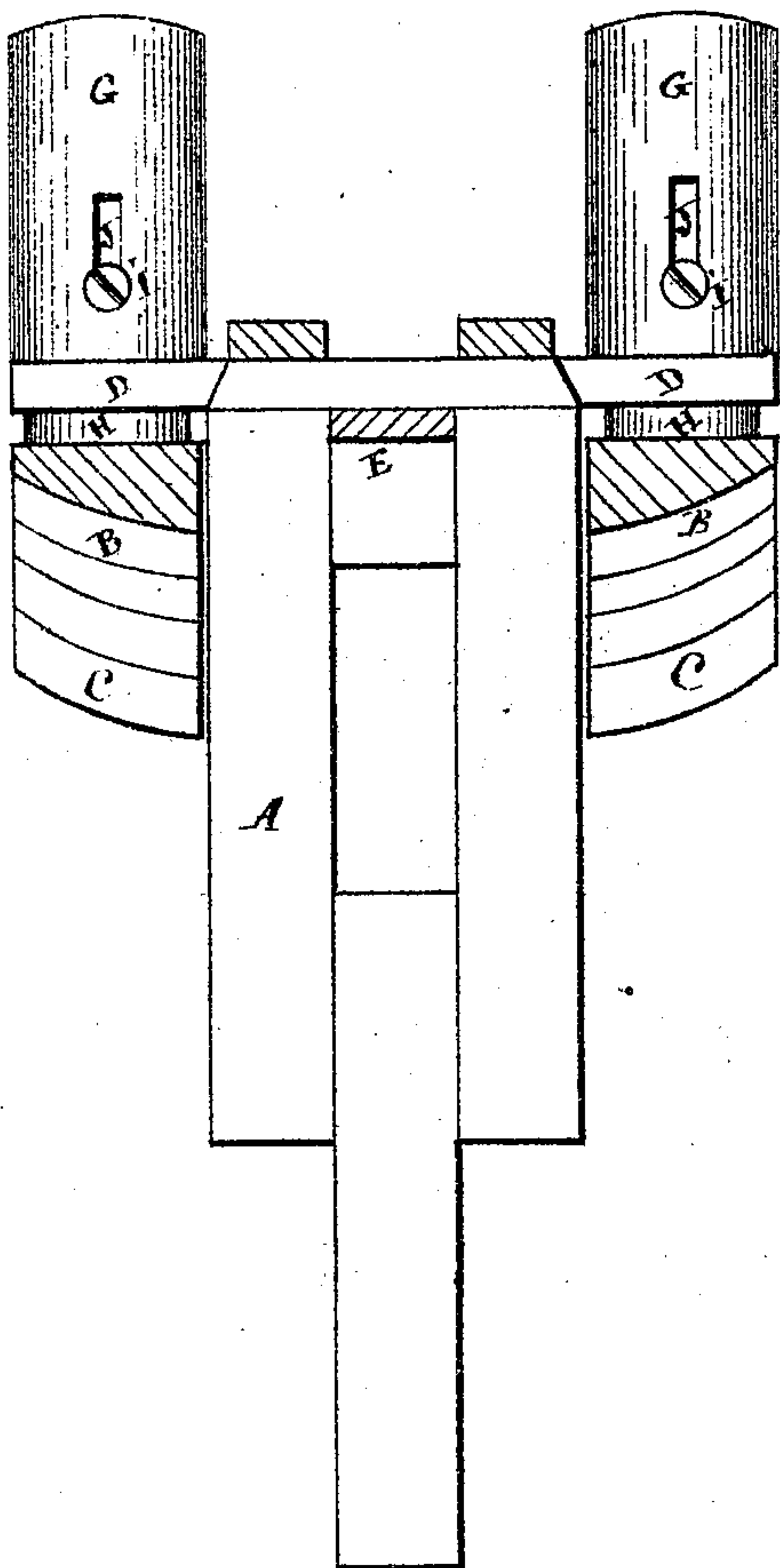


Fig: 2.

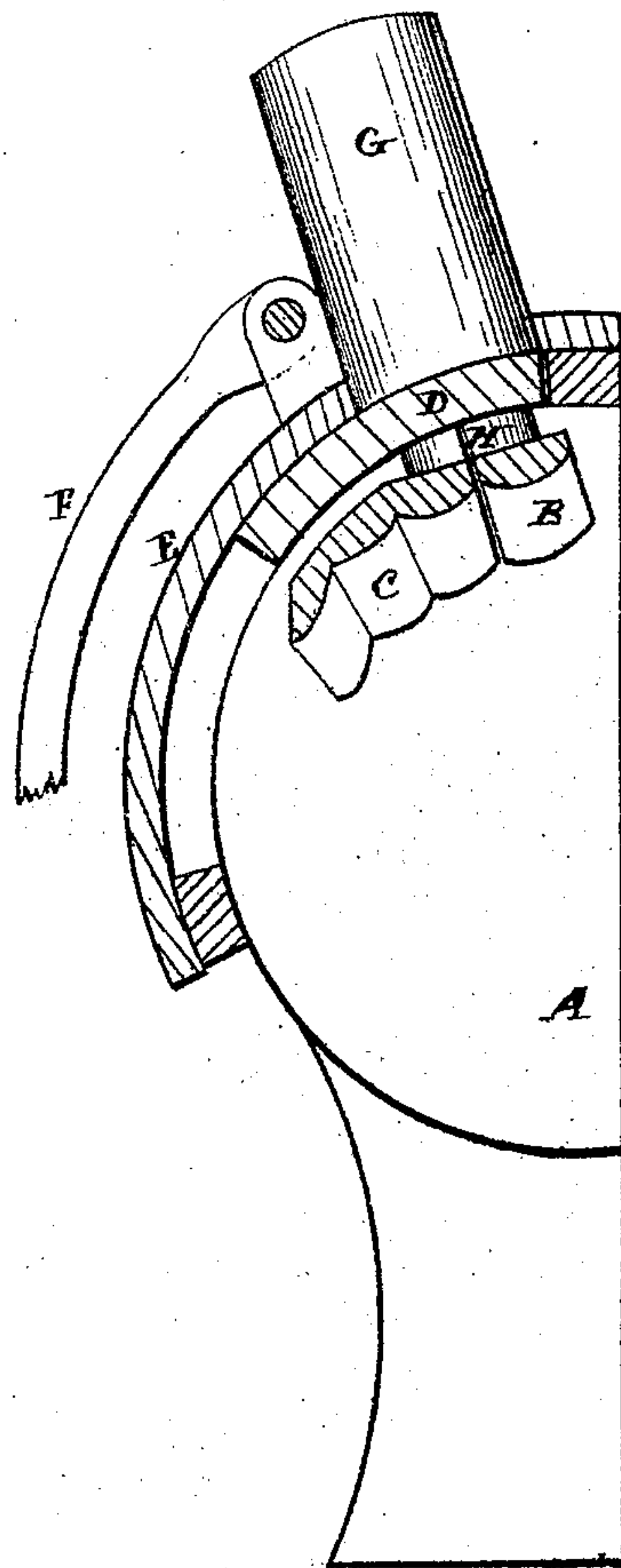
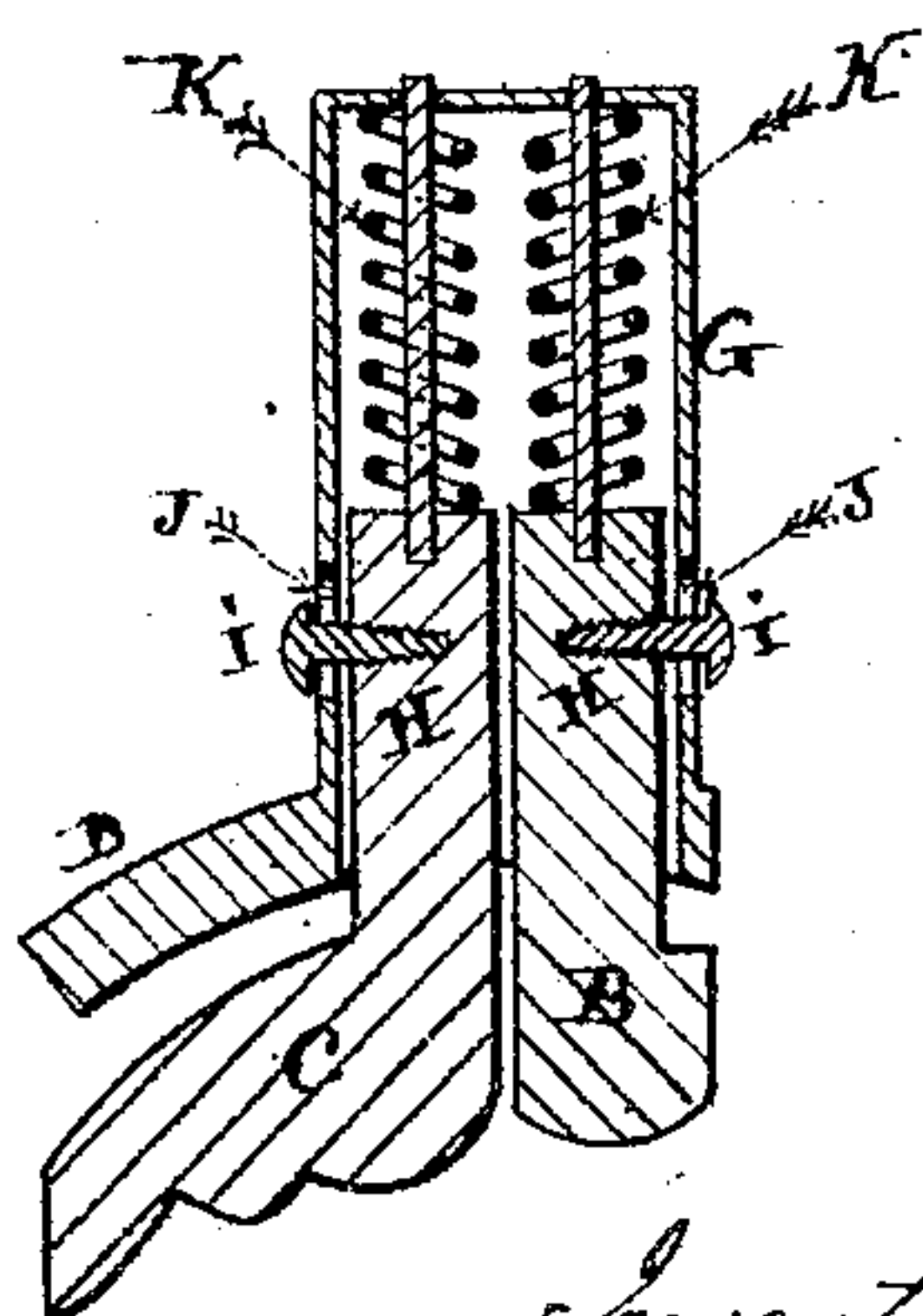
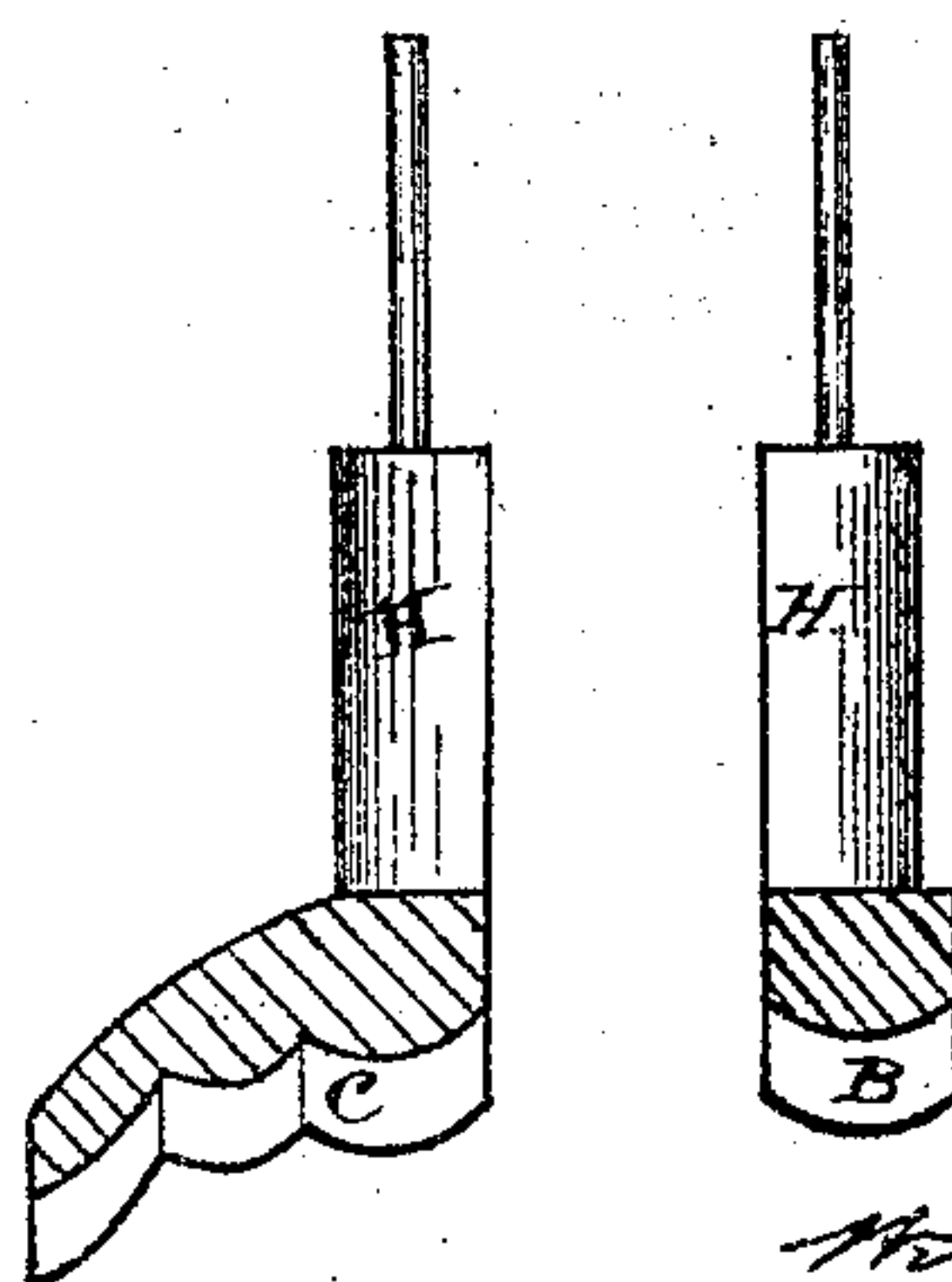


Fig: 3.



Inventor
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Fig: 4. Fig: 5.



Witnesses
Charles L. Parry
Franklin Parry.

UNITED STATES PATENT OFFICE.

CHARLES H. HELMS, OF POUGHKEEPSIE, NEW YORK.

IMPROVEMENT IN BOOT-AND-SHOE-HEEL POLISHERS.

Specification forming part of Letters Patent No. 119,707, dated October 10, 1871.

To all whom it may concern:

Be it known that I, CHARLES H. HELMS, of Poughkeepsie, Dutchess county, and State of New York, have invented certain new and useful Improvements in Heel-Polishers for Boots and Shoes; and I do hereby declare that the following is a full description of the same.

The nature of my invention consists in making the polisher with a corrugated rubbing surface and in two or more separate parts, so arranged beside each other in suitable boxes as to adapt themselves to the varying curvatures of the heel by means of pressure-springs in the boxes, and thus obtain an elastic and, at the same time, a uniform and rapid polishing-action upon the heel; but,

To describe my invention more particularly, I will refer to the accompanying drawing forming a part of this specification, the same letters of reference wherever they occur referring to like parts.

Figure 1 is a front view of the polishers as secured to the stock in which they work. Fig. 2 is a side view of the same. Fig. 3 is a cut sectional view of the polishers. Figs. 4 and 5 are detached side views of the separate parts composing the polisher.

A is the stock or head of the frame of the machine in which the polishers B and C are arranged. This stock is the same in mode of construction as described in my patent of July 25, 1871, for improvements in machines for polishing boot-and-shoe heels; and as my present invention does not relate to this part of the machine, except simply to show its connection therewith, do not deem it necessary to give a more particular description of it. Upon the rounded end of the stock is arranged a reciprocating slide, D, which is held loosely in place thereon by a strap, E, passing over the upper side of the slide, and having its ends properly secured to the front and back faces of the stock, so as to let the slide have a free and easy reciprocating motion underneath it and upon the rounded ends of the stock. This reciprocating motion is given by a pitman-rod, F, having one end connecting with a stud projecting from the slide D, and the other end to any suitable propelling-wheels for operating the machine. On the upper sides of the reciprocating slides are secured, solidly, hollow boxes G. Into these

boxes is inserted the studs H, on the upper sides of the polishers B and C, and are held therein by pins, I, secured in the sides of the studs H through vertical slots J in the sides of the boxes. This is to permit the polishers to have an elastic pressure on the heel by means of the spiral springs K, secured to the heads of the studs H, under the cover of the box in which the studs work. The polishers B and C are formed as independent parts of each polisher properly, and each part acts with its elastic pressure upon the heel independently of the other part. The object of this is to enable the polisher to adapt itself to all parts of the irregular surface of the heel.

In my former patent of July 25, 1871, the polisher was made in one piece, and though curved to fit the outline of the heel, yet, owing to the rapid vibratory motion of the polishers, it has been found that but one point of contact with the heel existed. By subdividing the polisher into two or more parts arranged in close contact with each other, and each part having an independent elastic pressure-spring to keep it upon the surface of the heel, more than double the effectiveness of the polishers is obtained without adding the least appreciable amount of power to accomplish the result. The rubbing or polishing faces of these polishers are to be corrugated, and the polishers are to be made solid, and heated by a jet of gas-flame arranged to come in contact with the polishers at the back side of the stock at each vibration of the polishers. As it is intended to heat the polishers before starting the machine, the amount of heat added by contact with the jet of flame and friction by contact with the heel is found to impart all the heat necessary to produce a finished and expeditious polish on the heel.

Having now described my improvement, I will proceed to set forth what I claim and desire to secure by Letters Patent of the United States.

The heel-polishers, constructed of two or more parts, B and C, in combination with the elastic pressure springs K and reciprocating slide D, substantially as described and for the purposes set forth.

CHARLES H. HELMS.

Witnesses:

CHARLES L. BARRITT,
FRANKLIN BARRITT.

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