

(No Model.)

W. POLLEY.
ROTARY SOLE TRIMMER.

No. 446,013.

Patented Feb. 10, 1891.

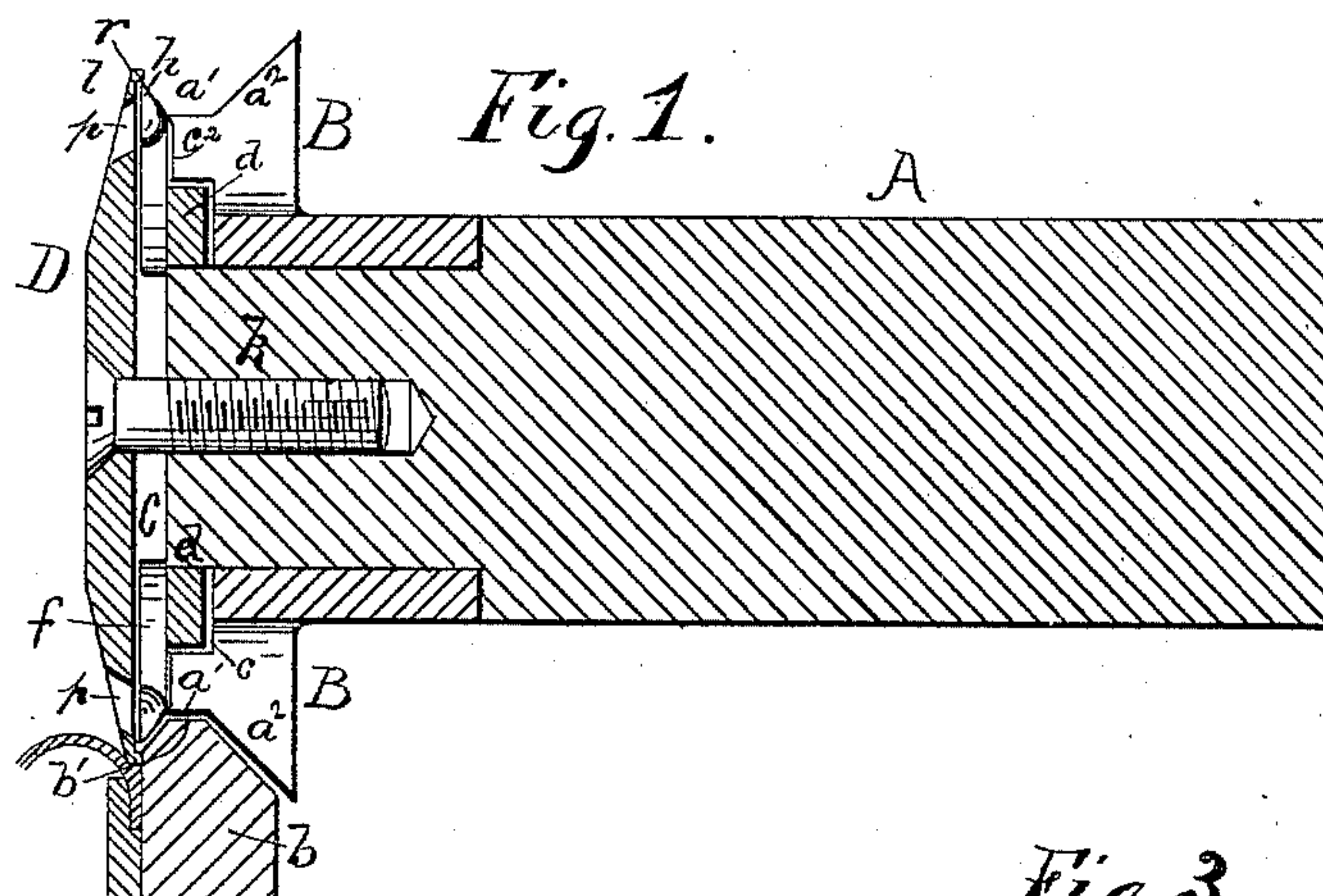


Fig. 1.

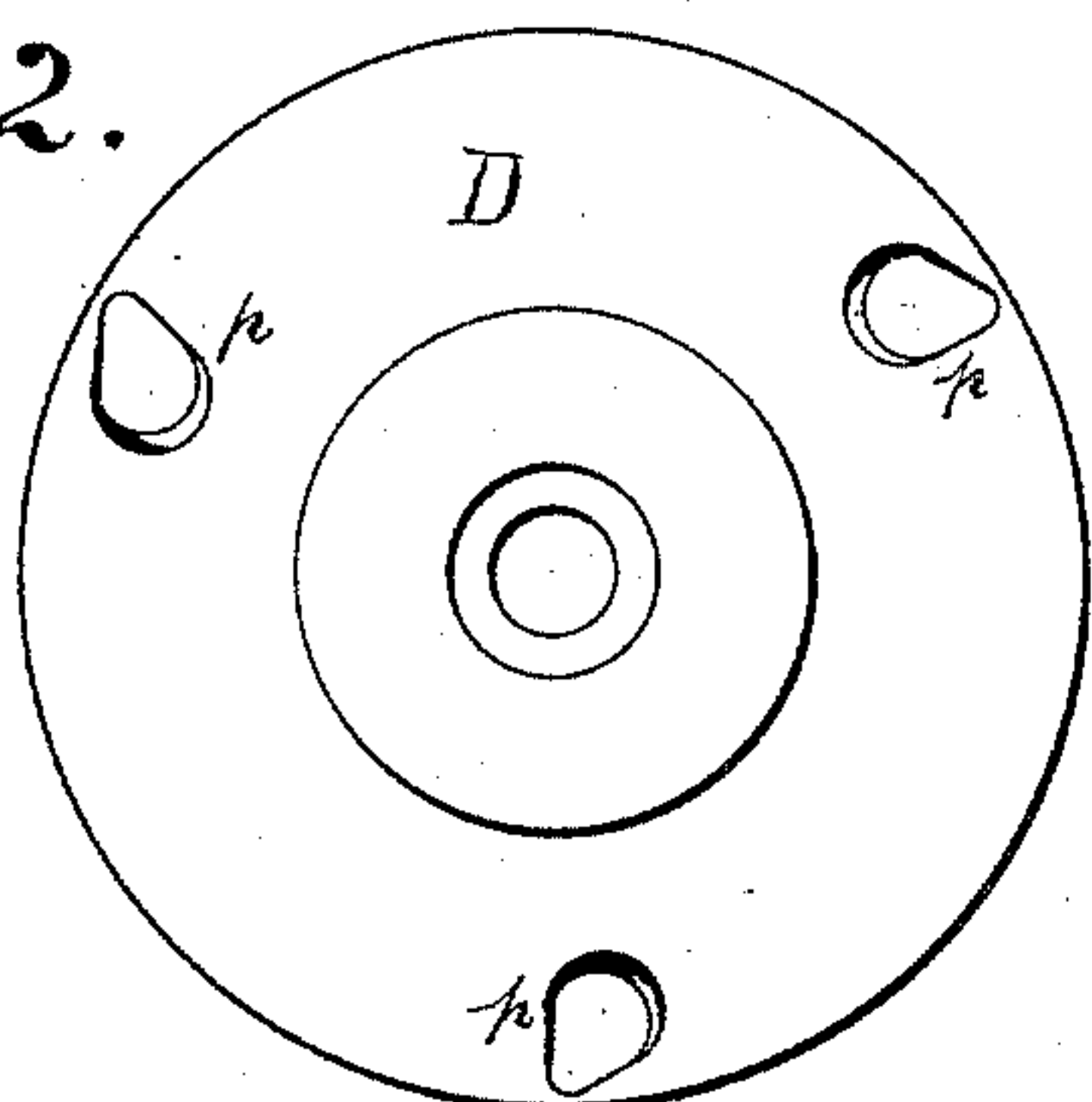


Fig. 4.

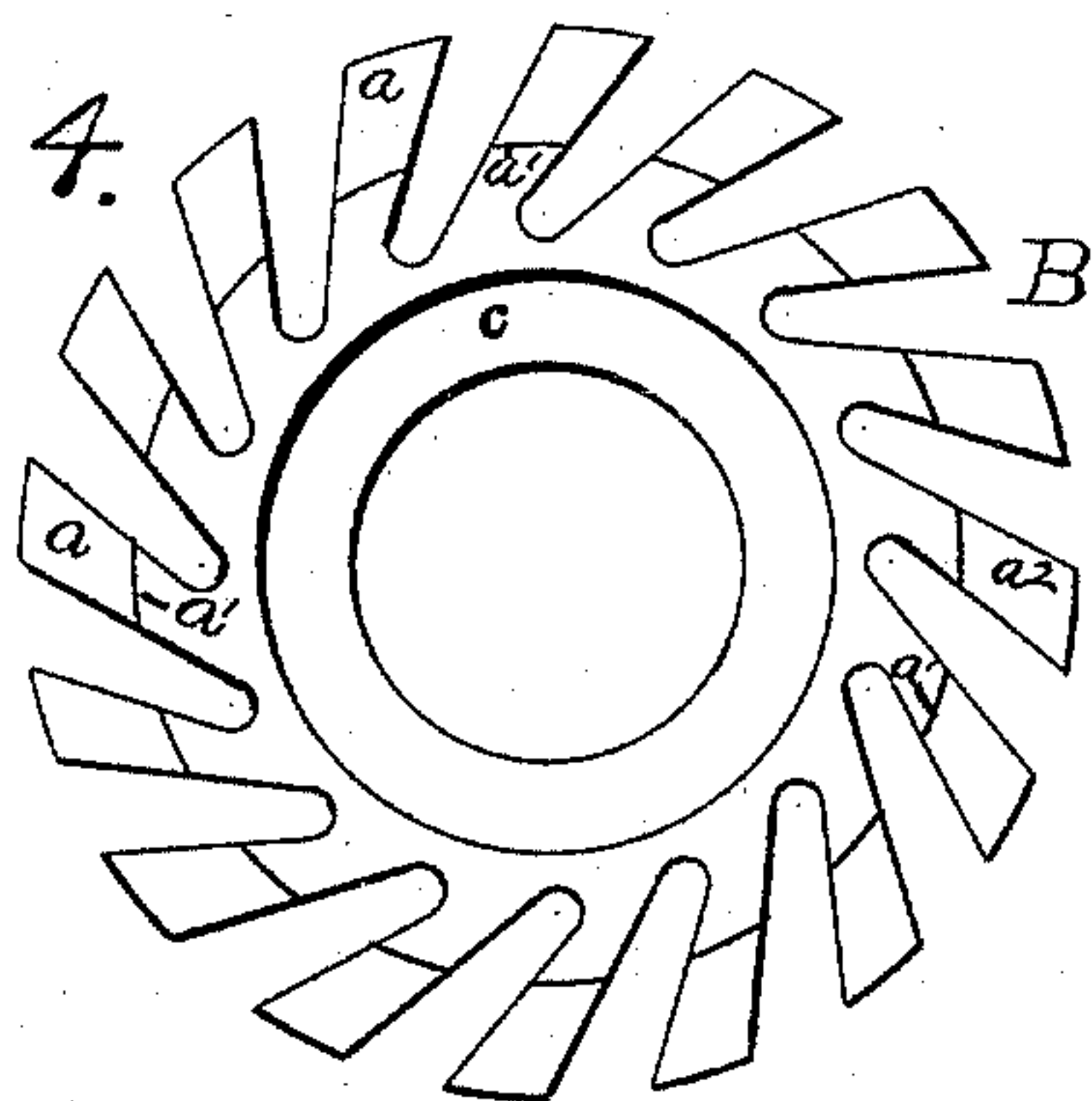


Fig. 3.

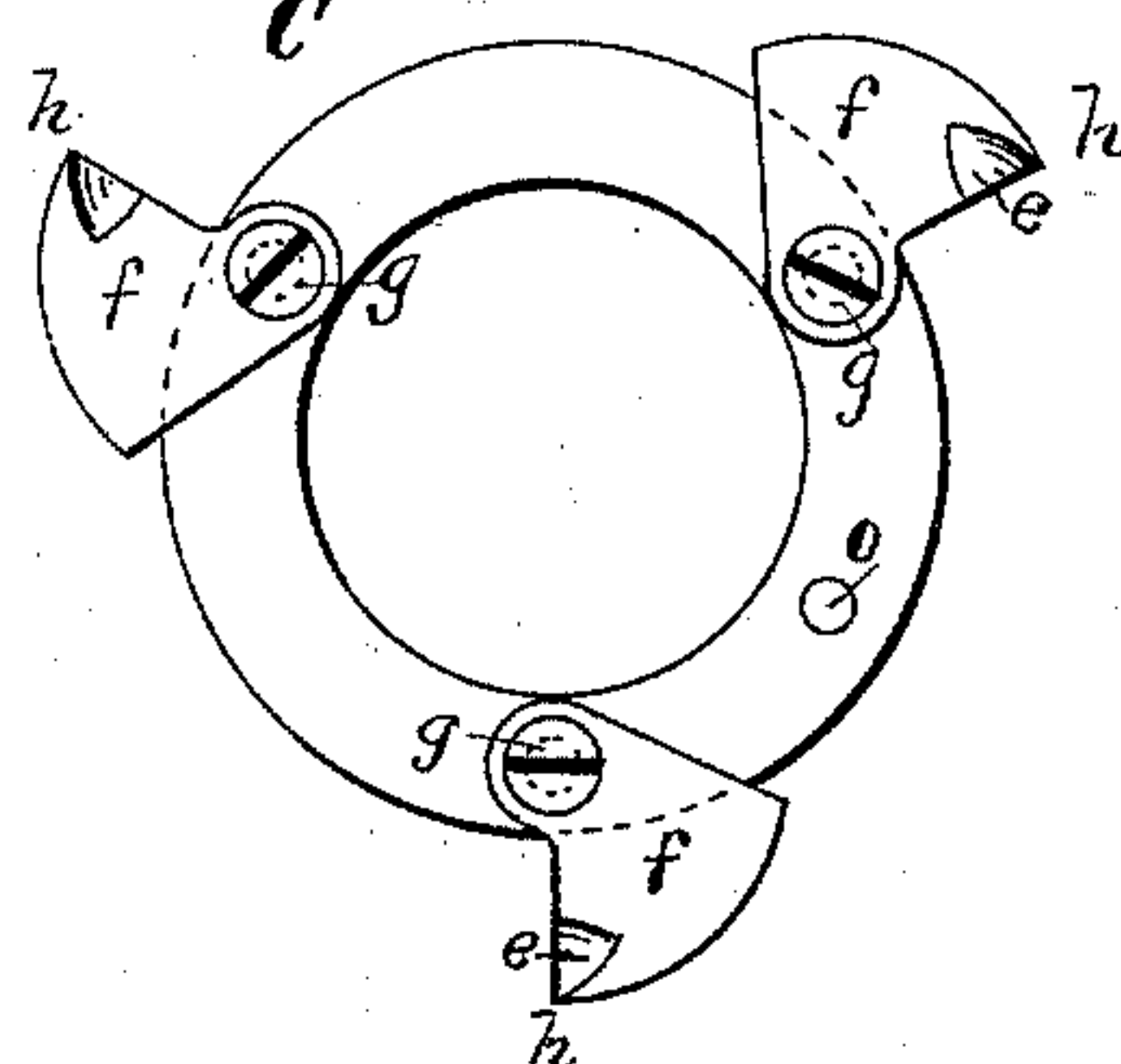
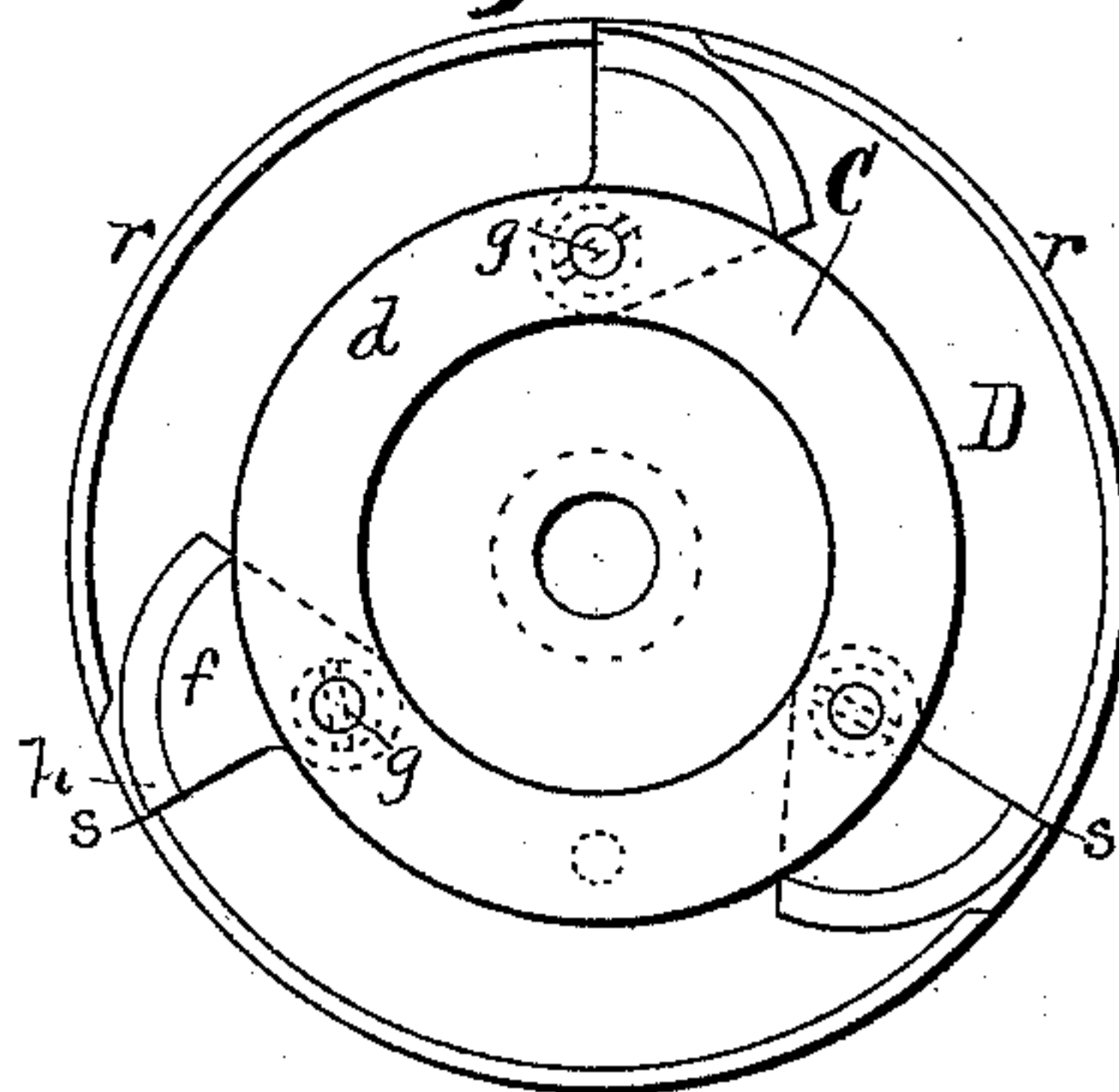


Fig. 5.



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ROTARY SOLE-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 446,013, dated February 10, 1891.

Application filed March 8, 1890. Serial No. 343,204. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM POLLEY, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Cutters for Trimming Shoe-Soles, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal vertical section of the cutter. Fig. 2 is a face view of the outside cap or washer. Fig. 3 is a similar view of the thin cutter for cutting the bevel of the sole next to the upper. Fig. 4 is a similar view of the main toothed cutter for cutting the edge of the sole. Fig. 5 is a similar view of the thin cutter and outer washer placed together from the inside.

My improvement relates to cutters for trimming the soles of fine shoes, the edges of which have two bevels, one at the top, forming the feather, extending outward and downward from the upper, the other at the bottom, extending from the square edge of the sole inward and downward reverse to the other and to the bottom of the sole.

The invention consists of a cutter of peculiar construction for accomplishing this work, as hereinafter described.

In the drawings, A shows the shaft upon which the cutter is mounted. B is the main cutter. This cutter is provided on its periphery with sharp-edged cutting-teeth *a a*, of the usual form for this kind of work. Each of these teeth on its cutting-edge is made with a long bevel *a*², that cuts the bottom bevel *b* of the sole, and a square edge *a'*, that cuts the square edge or breast *b'* of the sole. The outer face *c*² of the cutter B is made slightly concave to insure intimate contact at its outer angle with the inner face of the cutter C. This outer face of the cutter B is also formed with a socket or recess *c* to receive the thin cutter for trimming the feather or upper bevel of the sole.

C is the thin cutter for cutting the feather or the upper bevel next to the upper. It consists of a ring *d*, that fits in the socket *c* of the main cutter, before described, and a se-

ries of separated knives *f f f*, which are attached on the outside of the ring by set-screws *g g g*. The faces of these knives rest in close contact with the face of the main cutter, and the cutting-edges *h h* of the knives project outward at an angle and beyond the square edges *a'* of the main cutter sufficiently to cut the desired bevel next to the sole. The knives *f* are cam-shaped and stand at an incline away from the direction of motion, as shown in Fig. 3, so that as their edges wear away they can be turned up to the work, as will presently be described. On the outer face of the knives and back of the cutting-edges are grooves in the metal, forming throats *e e* for the escape of shavings, as will presently be described.

D is an outer cap or cover which fits face to face with the knives *f f f* and covers the same, the cap being secured to the end of the shaft by a clamping-screw *k*. The outer edge of the cap is beveled inward, as shown at *l*, to meet the edges of the knives and forms a guard running next to the upper to shield the latter from harm. Through the cap are made openings *p p*, which come in line with the throats *e e* of the knives, and such shavings and chips as enter the throats pass out through these openings and keep the cutter from choking. On the inner edge of the cap and at its periphery is a small right-angled projecting rib or flange *r*, in which at intervals corresponding with the position of the edges of the knives *f f* are made notches, forming shoulders or stops *s s*, against which the cutting-points of the teeth may be adjusted; or the knives *f f* may be adjusted by bringing them into contact with the inside of the flange *r*, in which case the stops *s s* will not be cut in the flange *r*.

Fig. 5 shows an inside view of the outer cap or cover and an outside view of the disk C, fitted thereto, the points of the cutting-knives being fitted up to the shoulders or stops just described. This not only centers the discharge-openings *p p* with the throats *e e*, but it serves as a stop to the knives. As the cutting-points of the knives wear away, the set-screws *g g* are loosened and the knives adjusted, the screws clamped in place again,

and thus the knives are always kept up to their work till all worn away. The outer edge of the knife is concentric with its pivot to produce this result, and the inclined position
5 of the knife always enables it to be brought up to place. On the outer face of the ring *d* is a projecting pin *o*, which fits into a corresponding hole in the inner face of the cap *D* to cause the parts to rotate together.

10 Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the main cutter *B*, the intermediate cutter *C*, fitted into its face
15 and provided with independent separately-adjustable knives *f f f*, and the covering-cap *D*, provided with openings *p p*, which coincide

with the cutting-edges of the knives, as herein shown and described.

2. The combination of the cutter *C*, provided with independent separately-adjustable knives *f f*, secured by clamping-screws and movable to different positions, and the cap or cover *D*, provided with stops *s s* for gaging
25 the forward movement of the knives, as herein shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 21st day of February, 1890.

WILLIAM POLLEY.

Witnesses:

E. D'AMOUR,
FLORENCE SWITZER.